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THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CXXVII.—No. 4271. DECEMBER 12, 1924.

SAVE THE CITY CHURCHES

THE controversy over the future of the City churches will shortly reach its climax. Probably the majority of architects and others who are interested in these buildings as monuments of art are by now thoroughly fogged as to the position in which we stand. This has been so lucidly explained by Sir Reginald Blomfield in his letter to the *Times*, of November 21, that we quote the following extract: "The Union of Benefices and Disposal of Churches (Metropolis) Measure, 1924, was passed on Tuesday (November 18) by the Church Assembly by a very large majority. The measure deals (1) with the redistribution of benefices, a matter with which the layman is not concerned, and (2) with the 'pulling down or removal of any church,' and 'the sale or disposal of its site,' with which all who care for our beautiful City churches are very much concerned. The *modus operandi* for this latter purpose appears to be as follows: In the first place, the Metropolitan Benefices Board is established, consisting of thirty members, of whom twenty-three are appointed by ecclesiastical or quasi-ecclesiastical bodies, and seven by lay bodies. In addition, if the church is wholly or partly within the City of London, four members are to be appointed by the City Council and one by the L.C.C. Reckoning these five additional members as laymen, this gives twelve lay to twenty-three clerical representatives. The Bishop, having marked down his church, gives not less than one month's notice either to the Ancient Monuments Board or the Royal Fine Art Commission (it is not clear which), and to the Benefices Board. The Ancient Monuments Board may advise the Benefices Board as to the value of the building in question, and the Benefices Board may, 'if in its discretion it thinks fit,' advise the Bishop in regard to the recommendations of the Ancient Monuments Board; or, on the other hand, it may put these recommendations into the waste paper basket. After this, the Bishop appoints a commission consisting of five members to enquire into and report on the scheme. If the commission reports to the Bishop in favour of the scheme, the Bishop may require the Ecclesiastical Commissioners to frame a scheme in accordance with the report of the commission. Notice has to be sent to various persons and bodies named in a schedule, who shall have not less than three months within which they can appeal to the Benefices Board. If the latter body approves the scheme, the Bishop calls on the Ecclesiastical Commissioners to certify the scheme and its approval by the Bishop to the Privy Council. A final right of appeal to the Privy Council within one month is allowed, but in the face of the powerful organisation of the Benefices Board, the Bishop, and the Ecclesiastical Commissioners, it seems very improbable that an appeal would be successful. If, on the other hand, the Benefices Board does not approve the scheme, the scheme is dropped for the time, but after an interval of five years the Bishop can set the ball rolling again by appointing another commission. The destruction of City churches, which so far has proceeded in a somewhat casual manner, will, if this measure be passed, be regularised and a very dangerous principle formally recognised."

Sir Reginald remarks that the measure was first introduced after the report of the Phillimore Commission in 1919, and he reminds us that if the recommendations of Lord Phillimore's Commission were carried out only thirty of the parish churches surviving or rebuilt after the Fire would be left. The Bishop's contention that he has to choose between his respect for a beautiful building and his longing to save living souls is hardly justified. How can it save souls to pull down monuments of past religious zeal to make room for commercial buildings? In "Notes," in our issue of November 28, we suggested that such a contention amounts to an admission that the Church of England is a dying institution, and this we do not believe.

It is unfortunate that the sale of these churches and the necessity of reducing the cost of their upkeep should be so much associated with their destruction. We all admit that things cannot go on as they are, but there are numerous alternatives to pulling the churches down. We prize them not only as the creations of our greatest architect, but as witnesses to spiritual life in a great city. If they were sold, subject to safeguards as to their retention, to other religious bodies, or to suitable secular bodies, such a course could not reasonably be objected to; neither could the most exacting churchman object to their use for secular purposes when the same churchman is prepared to see these consecrated sites used to accommodate offices and warehouses. The site values when the buildings are demolished would in any case be much less than may be imagined, because they would be subject to rights of light in every direction.

Supposing that these churches had been old Gothic buildings, would we hear so much talk about pulling them down? One doubts it. Wren's architecture is little appreciated by the ecclesiastical mind to-day, and the architect's grievance is that it is wrong for their fate to be left ultimately in the hands of ecclesiastics, who are laymen where architecture is concerned. As regards reasonable alternatives, why is it not possible for the Church to press for the inclusion of many of these buildings in the list of Ancient Monuments, to be kept up as such? If St. Vedast's, St. Magnus, St. Anne and St. Agnes, St. Nicholas, St. Mary-at-Hill, and St. Dunstan-in-the-East, were taken over and the Church relieved of all responsibility concerning them it would ease the burden materially and save these six fine buildings from the destruction to which the Commission of four years ago attempted to consign them. If the State in some way made itself responsible for these six, the City of London might itself relieve the Church of the burden of six more, and the Church's difficulties would thus be removed. It will be argued that, even if the Church were relieved of upkeep, it would still be without what it needs most—money locked up in the sites. The value of these sites represents an unearned increment, on the enjoyment of which the Church should be the last to insist, lest it be open to the charge that it is as greedy of gain through the more speculative of commercial methods as commerce itself.

The piecemeal destruction in the past has been bad enough; under it we lost seventeen churches; but if the Church, which already commands such powers of destruction, is still unsatisfied, is it astonishing that we should be alarmed at the possibilities that await us in the future, when the power to destroy is immensely increased? We sincerely hope that Parliament will give expression to the determination of the mass of architectural and instructed opinion and refrain from handing over such arbitrary powers to those who neither by training nor knowledge are competent to decide upon the future of our great national monuments.

NOTES.

The President of the Royal Academy. We regret that it is necessary for Sir Aston Webb to resign his Presidentship of the Royal Academy owing to his having passed the age-limit. The Academy was fortunate in his appointment to its presidency, for in all his official capacities—and they have been numerous and varied—Sir Aston has always exhibited fine qualities of tact, sense, and imagination. These are things which do not always go together, but in such matters as have been the main business of his life they have given Sir Aston Webb an influence which few attain. We are glad to know that he is now back in active work.

Town and City Development. The great importance of foresight and imagination in regard to the future development of our towns is continually being impressed on our thoughts. We have just now been confronted by the more or less imminent sale of the Foundling Hospital, with its large acreage of land set free, the surprising suggestion for traffic roads through the parks, the possibilities of some fairly exhaustive consideration of the Thames bridges, and possible drastic action, and the possibilities which underlie future changes in the Broad at Oxford. Such considerations, with all the possibilities for good or ill which face us in the not distant future, call for serious and active work by such bodies as the London Society, whose great aim is to make our towns and cities more beautiful, more convenient, and more worthy of our modern civilisation.

Roads Across the Parks. The proposal to make use of the public parks for new roads will, we feel sure, call forth strenuous opposition. In fact, we should hardly suppose it to be put forth seriously. From the interminable hustle and roar of the streets the parks offer us almost the only refuge and quiet left, and contrast with and compensate for the endless unrest of the crowded thoroughfares. The charm and seclusion of St. James's Park would be lost were a road driven, as has been proposed, right through it from Buckingham Palace to Piccadilly. It is also very doubtful whether much traffic pressure would be relieved thereby. In a letter to a contemporary, Mr. Geoffrey Faber says, with great truth, "The value in a city, such as mechanical transport has made" of London of these large areas free, or nearly free, from the noise and the smell "of motor traffic is beyond computation." Life would cease to be endurable in London, and lose what is almost its chief attraction, were the parks drawn into the welter which mechanical transport has created. The Home Secretary appears to us singularly ill-advised in suggesting that any adequate solution of the traffic difficulty is to be found in cutting up the parks.

City Improvements. The Foundling Hospital is to be removed, and the property is, we believe, already sold; and it appears to us that the rightness or wrongness of such changes altogether depends on what spirit and purpose the site thus acquired is made use of. We are sorry, as all must be who have been familiar with this old and very pleasant landmark, that it should be taken from us; but it is difficult to decide that it is altogether undesirable, the requirements of London being so much altered. Then, at Oxford, on the south side of "The Broad," opposite Balliol College, a row of old shops, the leases having fallen in, are in danger of replacement. One portion of the property has already been sold, and, unless the owners of the property—in this case, the City of Oxford—make proper conditions in their covenants in regard to rebuilding, the owners of the property can put up any building they please. It is evidence of the existing anarchy of our urban conditions that this should be so; that property situated in the University part of the town is in peril of any kind of use which the owner's private interest directs him to make of it. It is, therefore, important for the City of Oxford to respect its obligations to the amenities of an ancient city, already grievously disfigured by the vandalisms it has suffered in recent years. Otherwise a cinema house may be erected opposite Balliol College, or the municipality, desiring to increase its rates, may encourage the erection of great buildings, dwarfing all the surroundings. Best of all, were it possible, for the University to buy the property, so that it may be retained for University use.

The London Building Act. Those interested in building construction in London will be looking forward to the report which Mr. Topham Forrest, Architect to the London County Council, is preparing as the

Lancaster War Memorial. Messrs. Thomas H. Mawson & Sons, Architects.

[Unveiled recently at Lancaster, the bronze figure was executed by Messrs. Martyns, of Cheltenham, the bronze panel by Messrs. Singer, of Frome, and the stone work by Mr. Arthur Toms, of Lancaster. The stone is "Stancliffe."]

Troon War Memorial.

MR. WALTER GILBERT, Sculptor.

[The bronze figure is 10 ft. 6 in. high, standing on a granite pedestal, 13 ft. high.]

result of the two months' visit to the United States from which he has just returned. It will be admitted that the London Building Act is in need of amendment to bring it up to date, and it was with the object of investigating modern building methods in America with a view to ascertaining how best the London building regulations could be revised to bring them into line with developments in constructional methods that the visit was undertaken. We understand that Mr. Topham Forrest is more than ever convinced of the necessity for the removal of the anomalies in the Act which hinder the progress of London. Theatres, hotels, schools, railway stations, traffic regulations, and small houses have all been studied by him, and he will no doubt have some valuable recommendations on these subjects to make in his report.

American Impressions.

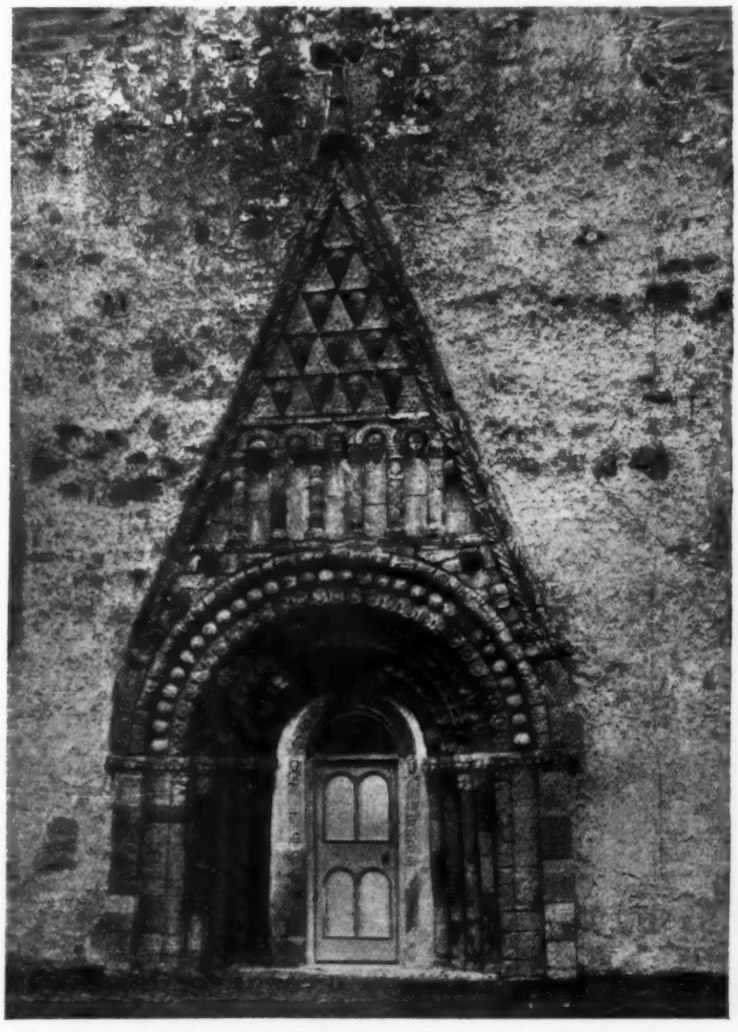
MR. TOPHAM FORREST has brought back many impressions from America, and is of the opinion that we have much to learn from that country. In educational buildings and their equipment he thinks America is far ahead of us, and the same applies to theatre planning and means of escape in case of fire. The latest New York "skyscrapers" are, he thinks, extraordinarily fine architecture as regards detail, and those built since the zoning laws came into operation are very fine compositions as a whole. The planning of railway stations, too, is carried out wonderfully well in the United States, where the architect is considerably helped by the fact that in most cases the tracks are below ground level. There is at least one subject, however, in which we are in advance of the cities of the United States, and that is in slum clearances, although the fittings and domestic appointments of American tenements are generally far superior to anything found in this country in similar classes of dwellings. Concrete is used considerably in America for small houses, and Mr. Forrest says he wants to employ concrete to a much greater extent for the thousands of new houses to be built by the L.C.C.

Higher Buildings.

ALTHOUGH Mr. Topham Forrest thinks very highly of the New York "skyscrapers," he does not foresee their adoption in London; nor, indeed, does he desire to. "I never wish to see 'skyscrapers' in London," he tells us, "and I do not think we shall ever see them. I never want to see London look like New York, but that is a different thing from allowing slightly higher buildings in London."

The Fine Arts in Ireland.

WE note that a Fine Arts Course in a Free University has just been instituted in Dublin under the direction of Count Plunkett, Hon. A.R.I.B.A. We understand that, after dealing with the general theory of art, this course proceeds to examine the progress of the arts in Ireland, beginning with metal work and primitive architecture in Pagan times. Subsequent lectures deal with the gradual changes and developments of the arts after the coming of St. Patrick, and the assimilation of Christian ideas from other nations, showing the persistence of racial methods and styles. Ireland is rich in early architecture, and the course of study, which includes the Romanesque churches, round towers, crosses, and incised slabs, with their relationship to similar work elsewhere, should be extremely valuable. The course is to carry on to the present day, and we hope that it will help Ireland to mould a modern architecture expressive of her own needs and aspirations. She can learn a good deal from England, but let her beware what she learns!



Clonfert Cathedral, Ireland: West Doorway.

GENERAL NEWS

Professional Announcement.

The address of Mr. Edwin J. Dod, A.R.I.B.A., is now Cunard Building, Liverpool.

The Royal Academy.

Mr. Frank Dicksee, R.A., was elected President of the Royal Academy last Wednesday in succession to Sir Aston Webb, who has retired, as he has reached the age limit.

Manchester Infirmary.

The Public Health Committee of the Manchester Corporation recently decided to proceed with its proposal for a big extension of Abergele Sanatorium. The scheme is to provide 546 more beds for children, at an estimated cost of about £180,000.

Aberdeen Building Scheme.

Plans for the erection of buildings at the cost of £10,000 by the Royal National Mission to Deep Sea Fishermen, at the corner of Palmerston-road and Market-street, Aberdeen, were passed recently at a meeting of the Lands and Fishing Committee of Aberdeen Harbour Board.

Rotherham Technical College.

In connection with the proposed erection of a technical college and school of art on a site in Howard-street, the Rotherham E.C. recommend that architects be invited to submit competitive designs, premiums to be £200, £100, and £50. It is suggested that an assessor should be nominated by the President of the R.I.B.A.

William Booth Memorial.

Messrs. Fleetwood, Eversden & King, F.S.I., surveyors, of 3, New-court, Lincoln's Inn, W.C.2, have been appointed quantity surveyors for the William Booth Memorial Training College, which is to be erected shortly at Denmark Hill, at an approximate cost of £250,000. The architects are Messrs. Alex. Gordon and G. Morriss Viner, with Sir Giles Gilbert Scott, R.A., consulting architect.

In Memoriam.

A memorial service for Sir Thomas Graham Jackson, Bart., R.A., was held at 2.30 last Monday, at St. James's, Piccadilly. In the congregation were Sir Aston Webb, P.R.A., Sir Reginald Blomfield, R.A., Sir George Frampton, R.A., Sir William Goscombe John, R.A., Sir John Burnet, A.R.A., Viscount Dillon, Sir D. Y. Cameron, R.A., Mr. Ian MacAlister (representing the Royal Institute of British Architects), Major Corlett, (representing the Australian Architects), Sir Hugh and Major Jackson. The Ven. C. E. Lambert, Archdeacon of Hampstead, assisted by Canon Monroe, officiated.

R.I.B.A.

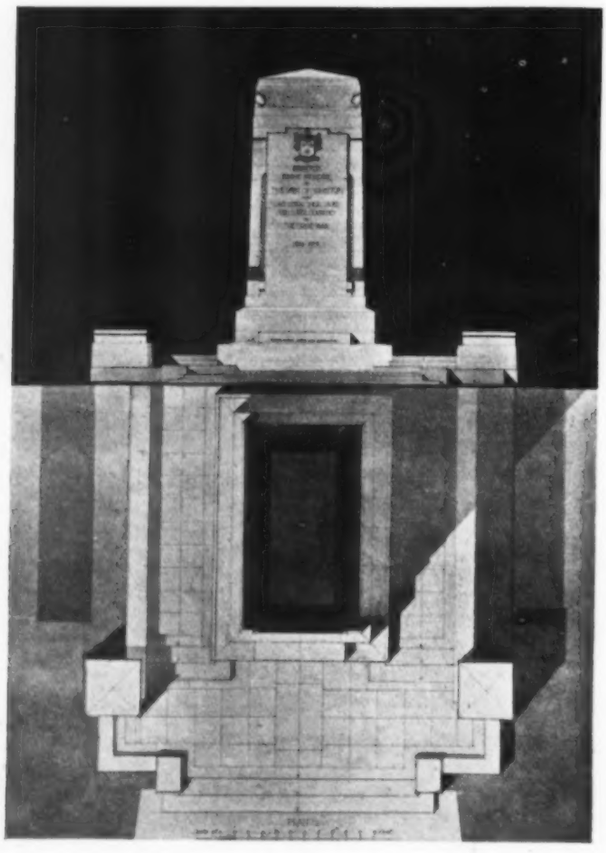
At a general meeting of the Royal Institute of British Architects, held on Monday, December 1, the following members were elected :—

As FELLOWS (20).—A. Archer-Betham; A. E. Biggs; W. D'Arcy Cathcart; L. A. Culliford, F.S.I.; N. J. Dawson; G. D. G. Hake; J. W. Hays; E. F. Knight; J. M. Lethbridge; T. F. MacLennan; H. F. Murrell; G. Nott; W. S. Owen, M.A., P.A.S.I.; R. M. Pigott, M.C.; C. G. Ripley; J. Smith; H. Thornton, B.A.; S. Toy, F.S.A.; H. A. Welch; and E. B. Wetenhall, F.S.I.

As ASSOCIATES (15).—C. K. Bhedwar; S. L. Blackburne; J. P. Blake, P.A.S.I.; K. A. Braden; C. H. Brightiff; A. A. V. Campbell; S. S. Careless; R. S. Cobb, M.C.; C. M. Cooper, M.A. (Oxon); R. S. De Burgh; C. G. W. Eve; A. G. Geeson; A. W. Hodges; E. Reily; and J. M. Wilson.

As HON. ASSOCIATES (6).—Frank Brangwyn, R.A., R.P.E., Hon. R.S.A.; E. D. MacLagan, Director of the Victoria and Albert Museum, South Kensington; J. C. Squire; Sir Charles Walston, Fellow of King's College, Cambridge, Litt.D. (Cantab.); J. Wells, M.A., Warden of Wadham College and Vice-Chancellor of the University of Oxford; and F. R. Yerbury.

As HON CORRESPONDING MEMBER (1).—Ragnar Ostberg, Professor at the Royal Academy of Art, Sweden.



Hamilton War Memorial Competition.
Design placed First: BY MR. T. HAROLD HUGHES, A.R.I.B.A.

HAMILTON MEMORIAL

THE Hamilton War Memorial Committee, having invited designs for the proposed memorial, received in reply 45 sets of plans. These were submitted to the assessor of the competition, Mr. George A. Paterson, President of the Institute of Architects in Glasgow, whose award we announced in our issue of last week.

The site for the memorial was fixed some time ago near to the main entrance of the public park. The assessor's report congratulated the committee on receiving so many excellent designs, which showed a great variety of ideas. After carefully considering the selection, the design placed first, he reported, was simple and dignified in character, refined in detail and proportion, and embodied all that was essential to make a permanent and satisfying memorial. The style adopted reflected the spirit of the age, and was in sympathy with the traditions of the district. The lay-out of the adjoining ground had been carefully considered.

The designs placed second, third and fourth showed great originality in design and detail, and thoroughly deserved the premiums offered.

The author in submitting his design gave the following information :—

Site : "The memorial has been placed on approximately the site indicated by the Committee. The main front faces north, and it is suggested that on the main axis the grass plot on the opposite side of the drive might be deepened and a site fixed for a mast and flag for ceremonial purposes. To the back of the memorial a slightly sunk and paved garden is indicated, the centre of which would be a grass and flower plot of cruciform shape. Right and left of the main axis are formal gardens, that to the east extending to the park boundary, its southern hedge forming a strong line which, with the flower bed, would lead up to the memorial from the entrance gates.

The Memorial : "The memorial takes the form of a cenotaph with simple enrichments and designed to accord with the architectural traditions of the neighbourhood. On the front a panel projects flanked by decorative palm leaves and with the arms of the Burgh carved in the centre. The dedicatory inscription would be in large Roman letters deeply incised on this panel, and at the sides and back the names of important battles in which Hamilton men took part would be inscribed. The lettering would be gilt. Provision for wreaths has been made by sinking the upper surface of the lower base and leaving a check to hold them in position."

COMPETITION NEWS

The Constantine Technical College.

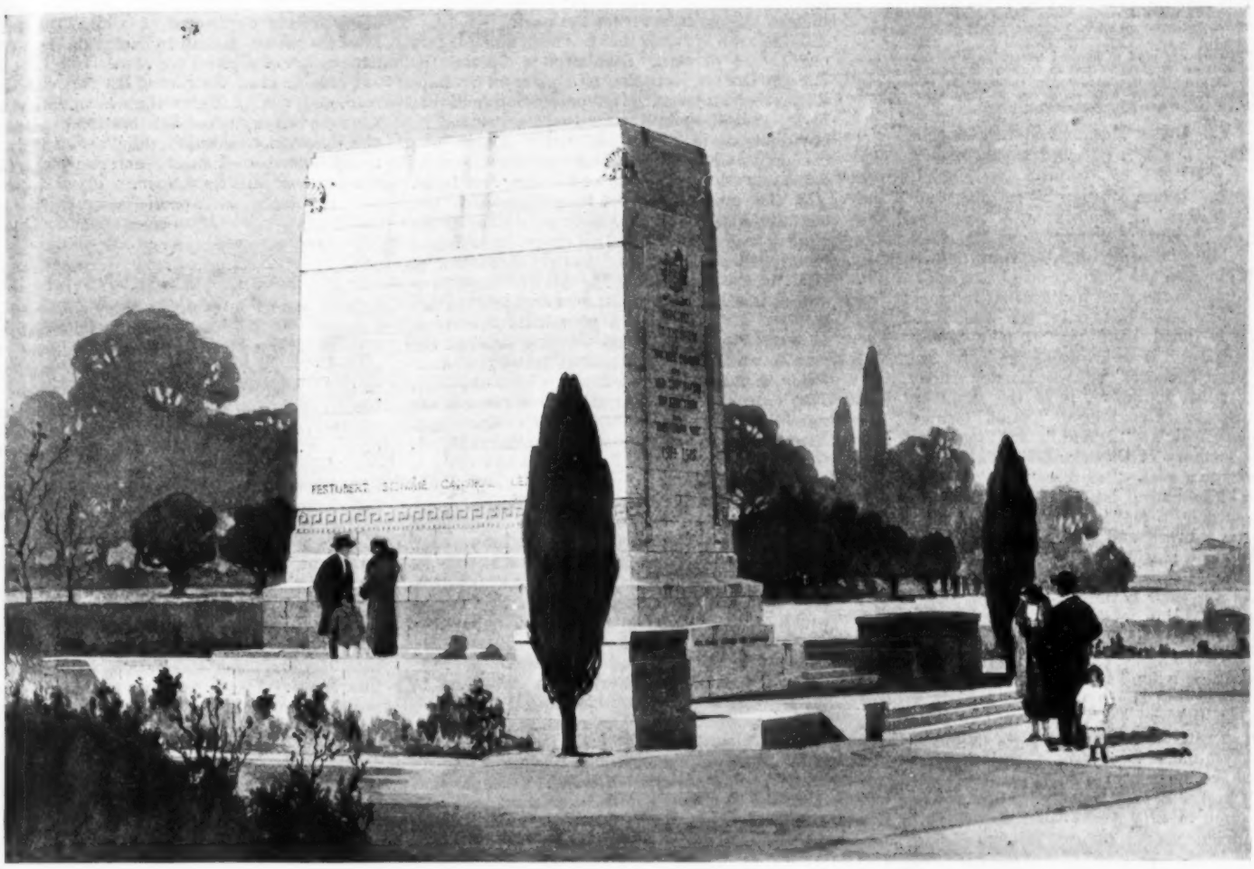
Architects are invited to submit designs in this competition. Mr. Percy Thomas, F.R.I.B.A., has been appointed assessor, and conditions can be obtained from the Secretary, on the payment of £1 1s., not later than December 27. (See advertisement this week.)

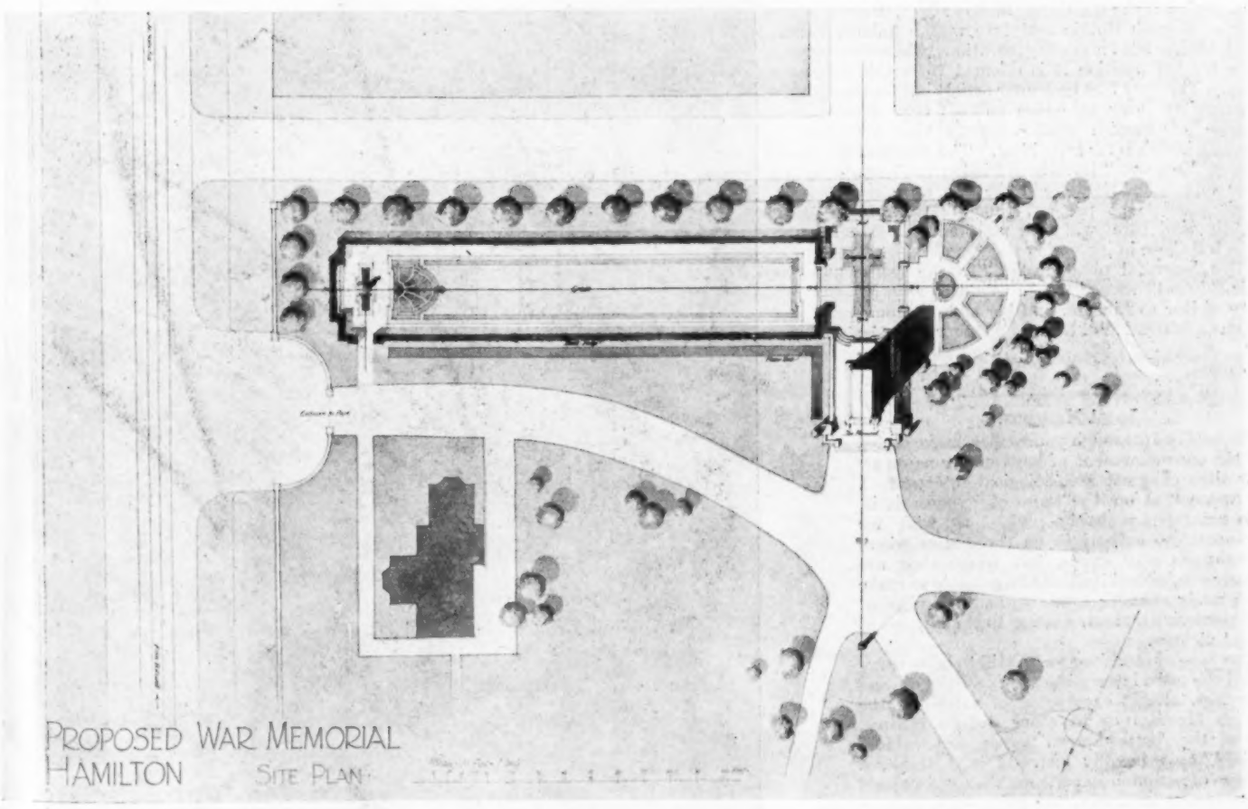
Willesden Town Hall.

The Establishment Committee of the Willesden U.D.C. has again had under consideration the regulations issued by the R.I.B.A. and its allied societies with regard to the promotion and conduct of architectural competitions, and recommends the Council to adopt these regulations and to at once consider the question of asking for competitive designs in connection with the proposed new town hall.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given) :—Masonic Hall (May 1). Manchester Art Gallery (Feb. 28; Aug. 22). Offices at Nairobi (Feb. 28; Nov. 7). Jugo-Slav Landscape (Dec. 31; Nov. 7). Church at Southport (no sending-in date; Nov. 7). Argentine Institute for the Blind (Dec. 31. 1925; Nov. 28) Leeds Library Feb. 16, 1925; Dec. 5). Valletta Layout une 30, 1925; Dec. 5).





Hamilton War Memorial Competition.

Design placed First: BY MR. T. HAROLD HUGHES, A.R.I.B.A. (*See p.* 926.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Queen Margaret Statue, Lincoln.

SIR,—It was a pleasure to see *The Builder* lending its aid to establish the claim of the Lincoln "Queen Margaret" to rank among the masterpieces of sculpture. I examined the statue at close quarters from Mr. Hodgson's scaffolding in September, and am assured that it belongs to the best period of English Gothic. Not only is there no justification for suggesting "restoration," but only the beauty of the queenly head gave rise to the belief. The "Margaret" is as lovely as the Torel bronze of "Queen Eleanor" in Westminster Abbey, and, in English sculpture, is of the same order of beauty as Donatello's "Saint George" or Michelangelo's "David" in Florentine art. The memory of these works adds point to Mr. Hodgson's plea that the "Queen Margaret" should be placed inside Lincoln Cathedral and replaced by a replica in the exterior niche next to the Edward and Eleanor statues. Both the Florentine statues were designed for the open air, but, in recent years, have been put under cover for their better preservation, the "Saint George" being represented by a replica in the niche on Or San Michele for which Donatello carved it.

There is a tendency to argue that because a stone carving has remained in a certain place for six hundred years, more or less unharmed, it may safely be left another six hundred years. This argument loses sight of the fact that when once the surface of a statue is lost disintegration proceeds very quickly. More damage can be done in fifty years than was done in five hundred years under original conditions. Already the hands and part of the lower draperies of the "Margaret" show signs of damage, though the head has lost none of its beauty. In the retro-choir at Lincoln, overlooking the site of the shrine of the well-loved Bishop Hugh, this glory of English Gothic sculpture would make its full beauty felt for many generations, whereas in its present position it is doomed to certain decay. The very fact that your article has been necessary to draw attention to this supreme example of English craft suggests that its present position is far from ideal. The graces of "Queen Margaret" have been hidden too long. To be appreciated they need to be seen, and that is not possible at present, though lovers of English sculpture will be tempted to the Cathedral Close in increasing numbers by Mr. S. Smith's beautiful photographs. In the retro-choir Edward's second Queen would be seen by every visitor to Lincoln, and her charms would become a possession of the many rather than the few.

London. ERNEST H. SHORT.

Local Museums.

SIR,—May I, through your paper, make a plea for the encouragement of local museums on or near sites of great archæological interest? I am aware that on the score of expense it is, unfortunately, probably useless to wish for representative collections on those sites where no museum now exists, but where they are already established it should be possible to make them really valuable to the student and pilgrim, and attractive and stimulating to the interest of casual visitors.

The present tendency seems still to be to carry off all the more interesting and beautiful objects—in fact, almost everything of value—to the British Museum or to other distant centres, where the better-known types are seldom noticed and virtually lost. It is, I think, a matter of common experience that the objects discovered about, say, the ruins of a Roman town or villa have a very much greater appeal if seen near the place where they were found than they would have in a great city museum. Surely this must be so to an especially great degree when, as in the cases of the castles of the Saxon shore, great ruins set amongst romantic and little-changed landscape help the least imaginative to reconstruct the past.

To take an instance that has been much before our notice of late. Richborough Castle, the Roman-British Rutupiæ, is a place of perhaps unsurpassed interest in the contemplation of that high civilisation in our land which reached its culmination in the days when Rome was decadent and which faded under conditions that baffle our studies in a fog of folk-lore and fable. Yet the museum in the castellum does not contain at all a representative collection of the very numerous objects that have been found here, even since it came under the control of H.M. Office of Works. Though well kept by a custodian who takes an interest and pride in her work, it is, relatively, a poor little collection. Many thousands of coins, covering most of the period and the mysterious transition that followed it, have been found about the site. There are, if I remember right, five coins in the museum. Two privately-owned coins, discovered long ago, just outside the preserved area, were borrowed by the British Museum officials two years ago under the promise that they should be returned to the curator of the Richborough Castle Museum after examination. Perhaps it would not be too much to hope that before long, out of its great stores, not only these two coins, but as complete a Richborough series as possible, including some of those minimi and sceattas which are of peculiar interest as belonging to a series some new example of which may yet help us to correct our theories of the beginning of the dark ages, might be returned for exhibition to the place where they were found.

Though the site of Rutupiæ is under State control, with an entrance fee, I noticed a form in the Museum asking for subscriptions of any sum, for the excavation work. I think that there are probably others besides myself who would be more anxious to make some small sacrifice for an alternative list to preserve on the spot objects duplicates of which the British Museum possesses than to hasten on the work of excavation of a preserved area.

I only mention the case of Richborough Castle as being one of those that have lately been brought before the public attention by notices of the excavation work in the Press. There are many other places, Roman and mediæval, where the same conditions prevail.

BERTRAM C. G. SHORE.

Waterloo Bridge.

At a recent meeting of the London County Council, the following recommendation of the Special Committee on Thames Bridges was agreed: "That the Council of the Institution of Civil Engineers be asked to express for the benefit of the Council their views on the question whether, having regard to the present condition of Waterloo Bridge, it would be practicable and reasonable to underpin all or some of the piers of the bridge, so as to render the structure permanently safe and to enable it to be restored to its original form."

In their report, the Special Committee stated that they had received a deputation from the Society for the Protection of Ancient Buildings, whose views were favourable to underpinning as a safe, permanent, and economical remedy which could be applied to the whole of the bridge with the exception of pier No. 4, and possibly pier No. 5. The society urged that an experiment should be tried on one pier. The committee expressed the view that the County Council would be wise to ask for the assistance of the Council of the Institution of Civil Engineers on the question of underpinning, in view of the outstanding importance of the preservation of the bridge.

Cleeve Abbey, Somerset: Refectory Roof.

ARCHITECTURAL EDUCATION.—III

By W. S. PURCHON.

THE various schools of architecture in the British Empire, while resembling each other closely in many particulars, vary in a number of ways. While it is well that there should be this general family resemblance, it will probably also be considered well that there should be variations in certain details of the courses and the methods of conducting them. It will be readily understood that the schools are subjected to various influences, some acting towards uniformity, others towards variety. Among the more important of the latter are various local conditions, such as the regulations of Universities and other institutions, local opportunities for conducting special courses of instruction, local architectural traditions (of increasing import with the development of the school system throughout the Empire), and the individualities of the members of the staffs of the schools. The latter is perhaps the most important of the factors tending towards variety, change, vitality and consequent development. For while it may be argued that great improvements may, and do, result from the persistent following of a uniform method, developments of fundamental importance are more likely to arise under conditions permitting of a considerable measure of freedom. Vitality is essentially good, variety and change not necessarily so; there is thus always a risk in the granting of additional freedom, but it is a risk well worth taking. In the case of the recognised schools of architecture, the risk accompanying the measure of freedom under which they work is amply covered by the conditions under which their students enjoy exemption from the examinations of the Institute.

In dealing with the various subjects of an architectural course, one point rapidly emerges; it is, of course, the relative claims of art and science. A very great deal—perhaps more than enough—has already been written on this topic, some urging the superior claims of art, others those of science, and others, yet again, claiming that the two are essentials, and that among essentials there are no degrees of importance. In the latter apparently logical statement there is the possibility of the lurking fallacy; it may be, for instance, that there are not two distinct things in question. One party may say that no matter how strong, useful and sanitary a structure may be, it is of no avail if it has not beauty, while the second party says in reply that the converse of this is also true. As a matter of practice it will probably be agreed that, so far as the schools are concerned, while two types of mind—that of the artist and that of the scientist or engineer—may be needed on the staff, the best results will be achieved when the former is the dominating influence.

In the early days of the schools in this country the various subjects in the course were frequently taught with little consideration of their relationship to each other, only gradually did this relationship become clear, and no clear-cut method of achieving a wise inter-relation of the various subjects has as yet emerged and been generally accepted. It is probable, indeed, that there are various ways in which this end may be reached, and there is even the possibility of "co-ordination" being ranked among the blessed words, with the consequent risk of exaggeration and obsession. The logically-minded might perhaps start with Egyptian buildings and study their design, construction, sanitation, &c., and produce designs in the Egyptian manner. A repetition of this process through the various styles would finally result in the study of the various aspects of modern work, and the production of a modern design in the last term of the five years' course. Something short of this is clearly indicated. We may—many would say we should—learn something of the construction of famous buildings as we study the history of architecture, but at the same time we should—again in the opinion of many—begin our studies of modern construction as soon as we begin our studies of ancient architecture, and begin them with simple matters and gradually proceed to more difficult ones, while the history of architectural development will be found to be by no means a study of buildings in which the difficulty of construction gradually increases.

It is, of course, possible to make a good case for the basing of early design subjects on the historical periods under consideration at the time, but there are those who hold strongly that this method violates a fundamental principle, and that the notion of successive period designing should not be encouraged. Possibly the right approach to the whole subject of co-ordination of subjects lies rather in the direction of the investigation of "pre-requisites." The main principle at the back of this method is the settling of the nature and amount of work which a student should undertake before he proceeds to a further stage, or before he undertakes a new type of work. It may, for instance, be argued that the student should attempt no architectural design of any kind until he has passed successfully through an outline course dealing with the whole of the main current of architectural development, and until he has similarly passed through elementary courses in architectural form, construction, mechanics, &c.

It will probably be found, again, that once design starts, it tends to outstrip construction, unless a deliberate attempt is made to retard rather than stimulate the imagination of the student. The latter may, for instance, introduce vaults and domes into his designs at a comparatively early period. He may, of course, be shown how they are constructed, but he will not be able to calculate the strength of such structures until a later period in his studies. Under the early method of co-ordination there was the temptation to produce graphic diagrams showing the stresses in such structures, before the student had had the opportunity of studying adequately the theory of construction.

It is of considerable importance, however, that each subject be studied on systematic and more or less formal lines; historical subjects proceeding in chronological order, constructional subjects proceeding from the simple to the more difficult, and subjects such as theory of structures gradually developing from first principles. This naturally leads to an apparent lack of co-ordination, but provided the lecture courses are kept within reasonable time limits, each of them dealt with on the clear understanding that it is leading towards modern design, and a proportion of the designs, as is normally the case, continued to the working drawing stage, the advantages would seem to outweigh the disadvantages. It may perhaps be argued that such a subject as Theory of Design could readily be largely dealt with in the courses on Architectural History, but such a suggestion would hardly be agreed to by the most vigorous advocates of co-ordination.

The main difficulty of co-relation arises in the early years of the course, and it may well be that we shall have to admit that during this early period the student is necessarily viewing architecture with a varying degree of clearness from various angles—historical, constructional, and theoretical—the latter both as regards design and also with reference to the calculations of strengths of structures. If, during these early years, each subject is studied and taught with a clear realisation of the end in view—the designing of modern buildings—it may perhaps be of little moment if his rate of progress along one approach (possibly a longer one) is more rapid than along another. Possibly at about the end of the third year the student will be able for the first time to see the building he is designing with approximately equal sharpness of vision from some three or four points of view. He may, for instance, be able to realise the historical developments which have made possible the style of his design, to give full details of the constructional methods he has adopted, and, if his design is a comparatively simple one, to calculate the strength of all its parts.

Another fundamental point which requires some thought before a consideration of the individual subjects of the course can be undertaken, is the question of dogmatic teaching. On the one hand it may be argued that right through the school course the student should be taught definitely and dogmatically, in order that he may have no shadow of doubt in his mind that the course he is following and the information he is assimilating are in every particular precisely accurate, and that any who may be following another path, no matter how slightly it may diverge from the true one, are preparing for themselves a hopeless future outside the pale. On the other hand, there are those who not only indicate to their students from the beginning that some of the views put forward are matters of opinion, but who also put before the student the opposing points of view. This divergence of method applies in the main to such subjects as Architectural History, Theory of Design and Architectural Construction; but even in such a subject as the theory of structures there is the possibility of indicating or refraining from indicating, the use of a variety of methods of solving a given problem.

The question is then, shall our teaching be entirely dogmatic, or entirely the reverse. Shall it be dogmatic in some subjects and not in others, or shall it be dogmatic in the early part of the course, and cease to be so in the later periods? These are interesting and important points, for whatever the method adopted may be during such a malleable period of the student's life, its effects will be long-lasting.

Closely connected with the above point is another almost equally interesting one. Should a student be encouraged to use his imagination and his inventive faculties right from the beginning of his course, or should there be a period of one, or perhaps even two, years during which his activities are entirely limited to the acquiring of information about the great works of the past and modern methods of construction, &c., and to the acquiring of facility as a draughtsman? If, for instance, architectural design is not started during the first year for the reasons previously given, it is at least a matter for consideration as to whether the students should work during this first year on simple design of a non-architectural type.

Allied to the above questions is the further one of the extent to which memory drawing tests can serve a useful purpose in the curriculum of a school of architecture. If, for instance, it is agreed that there are certain architectural forms which a student really ought to know—for the purpose of the argument it may be agreed that these forms are, for the time being, certain examples of the Greek, Roman and Renaissance orders—does it help the student to learn these forms if he has regular memory drawing tests dealing with them, and do such tests help him in other directions?

London School of Economics.

The following public lectures (open to the public without fee or ticket) on the Principles of Design have been arranged for 1925 by the London School of Economics and Political Science (University of London), Houghton-street, Aldwych, W.C.2. They will take place on Wednesdays, at 5 p.m.

January 14.—Introductory lecture, by B. J. Fletcher, Director of the Municipal Art School, Birmingham. 21.—"The Principles of Design as Applied to Buildings," by W. H. Ansell, M.C., F.R.I.B.A. 28.—"The Principles of Design as Applied to Textiles." Lecturer to be announced later.

February 4.—"The Principles of Design as Applied to Furniture," by H. P. Shapland, A.R.I.B.A. 11.—"The Principles of Design as Applied to Pots and Pans," by John Adams, late of the Pretoria School of Art. 18.—"The Principles of Design as Applied to Books and Printing," by Joseph Thorp. 25.—"The Principles of Design as Applied to Our Homes," by C. H. Collins Baker, Keeper and Secretary of the National Gallery.

March 4.—"The Principles of Design as Applied to Our Cities and Towns," by Frank Pick.

EXHIBITION OF AMERICAN WORKING DRAWINGS

A most interesting series of American working drawings has recently been on view at the Liverpool School of Architecture. These drawings have, for the large part, we understand, been collected and brought back by students of the School who, according to their excellent custom, have been working during the summer vacation in the offices of leading American architects, though one particularly fine set of prints has been presented to the School by Mr. Cass Gilbert. In such an exhibition as this, one is brought face to face with the fundamental differences between American and English practice. To the eyes of the English draughtsman unacquainted with American details, these drawings seem so overcrowded with information as to be unintelligible without the closest study. Upon investigation, however, several facts emerge to make the situation clear.

In the first place, it appears that drawings for presentation to the client are prepared to $\frac{1}{8}$ in. scale, together with an estimate of cost as, perhaps, is general in this country. When the scheme and probable cost are approved, work is started at once on $\frac{1}{4}$ in. scale drawings, and upon them practically every detail is carefully shown—steelwork, heating, plumbing, electric lighting, and vacuum installations, &c.—all indicated by means of symbols or a carefully devised system of *hachuring*. With the almost universal use of blue prints, colouring is unknown. In point of fact, these $\frac{1}{4}$ in. scale drawings seem of themselves sufficient for the carrying out of the whole job. Studies of various details, chiefly architectural as opposed to structural, are drawn out to $\frac{3}{4}$ in. scale and transferred to the $\frac{1}{4}$ in. Full size details are drawn out at the same time and everything is made to correspond. The $\frac{1}{4}$ in. and $\frac{3}{4}$ in. scale drawings are completely tied up with dimensions in every direction, minute fractions of an inch appearing in some cases to be accounted for.

While this work is going on, the specification writer in the office is engaged in drawing up the specification, and the steelwork expert, often also in the office, makes his calculations and prepares a separate set of details. When this work is all completed and not till then is the job sent out to tender. No bills of quantities are prepared, the contractor estimates, we understand, on a lump sum basis, or takes out rough quantities of his own. Of late, however, we learn that there is a movement on foot to introduce the English system of quantity surveying, it being thought by this means to get closer bids for work.

One can see at once the advantage to everybody of the architect having all his details worked out before the job is started. Much more time is, of course, allowed to the American architect for the work than is often the case here. It is held, and quite rightly we think, that progress is quicker that way, and valuable plant is not held up or a job kept waiting for further details to be sent along. Extensive alterations made by the client after the work is started must, of course, hold up the work very considerably, and one can only suppose that such alterations are discouraged.

Perhaps the most interesting set of working drawings in the exhibition was that by Mr. Cass Gilbert for the well-known Detroit Library, a building which is, probably, his masterpiece. One would say that these drawings represent the highest skill of the draughtsman's art, and there can be no doubt that the painstaking manner in which every detail is worked out and set down in its proper place in relation to the whole, contributed a great deal to the success of the building. Criticism of the working drawings for being overcrowded and fussy is easy, but the achievement, as illustrated by the photograph which accompanied the drawings, fully justifies the care expended.

The work of Messrs. York & Sawyer was illustrated by drawings of the Chester County Hospital. The most intimate knowledge of all hospital details was shown on the $\frac{1}{4}$ in. scale plans and sections, including the "cuspidor" in the dental room. It was noticed in this connection that all soil and waste pipes were carried down inside the cavity between the inner and outer linings of the external walls, a convenient way of disposing of them and, apparently, also a healthy one.

The Greenwich Savings Bank also by Messrs. York & Sawyer, was fully illustrated, the full size details for the interior bronze work being remarkably well drawn. The plan of the banking hall, it will be recalled, is in the form of a vast oval, a severe test for draughtsmanship. Here, again, all dimensions were fully figured, many, unobtainable otherwise, being calculated by trigonometry.

There were also included in the exhibition working drawings of the Bush Building in New York, by Messrs. Helmle & Corbett, together with several monuments by Van Buren Magonigle, including the famous McKinley Memorial. Amongst the working drawings of domestic work, drawn out with the same meticulous fullness of detail, were some residences by Messrs. Delano & Aldrich.

One is forced to the conclusion, after seeing such an exhibition, that there is the most intimate connection between the fine quality of the finished product of an American architectural office and the thoroughness and competency of the draughtsmen's work.

BRISTOL SCHOOL OF ARCHITECTURE

The annual exhibition and prize-giving of the Royal West of England Academy School of Architecture took place at the Academy, Bristol, on December 1. Mr. Maurice Webb, F.R.I.B.A., who presided, said the school had made astonishing progress. When, last summer, the Travelling Board of Architects toured the country visiting the schools and reporting how they were getting on, and if they were good enough to receive exemption from the intermediate examination, they came from Liverpool, where the school was one of the largest and best. They did not expect Bristol had in three years reached the stage to qualify for that exemption, and they were, therefore, astounded at the progress made. The work of the school was fully up to the standard of others; indeed, it was better than some, and quite as good as any other. In its own particular class it showed up as well as any school at the London Conference on Architectural Education, and there was one drawing in the Exhibition which was universally admitted to be the best of its type, and it was the work of a Bristol student. Though the work of the school was satisfactory, the financial position was not; it was the only school of architecture in the West of England, from Liverpool to Land's End, and considering the importance architecture played in our daily life every encouragement should be given to those who took up that calling. It was hoped to raise an endowment fund and so put the school permanently on its legs.

Dame Janet Stancomb Wills presented the prizes, and advised the students not to be above consulting their womenfolk when preparing plans for houses, as the little details which men always overlooked made all the difference in a house. The new Winterstoke House at Mill Hill was beautifully planned because the Matron had been consulted by the architect.

The following were the prize-winners:—The Dame Janet Stancomb Wills Travelling Studentship, value £25, Mr. A. J. Saise; the Architectural Association design prize, value £5 5s., Mr. R. H. Brentnall; the R.W.A. Silver Medal and the B.S.A. prize of £3 3s., Mr. R. T. Green; the Savory Design Medal, F. Bowden; the R.W.A. Bronze Medal and B.S.A. prize of £2 2s., Mr. J. H. Bourne; the Headmaster's prize for the most marked progress, Mr. A. E. Powell. Special prizes for proportion were awarded to Messrs. W. J. Thrasher, Mr. H. Brentnall, A. J. Saise, and F. Bowden.

SOUTH WALES INSTITUTE OF ARCHITECTS

The annual prize distribution and exhibition of students' work of the South Wales Institute of Architects, Central (Cardiff) Branch, and the Department of Architecture and Civic Design, at the Technical College, Cardiff, was held recently in the Assembly Hall, at the Technical College.

The Chairman (Mr. T. Alwyn Lloyd, F.R.I.B.A.) referred to the excellent work done by the Cardiff School of Architecture during the 4½ years that it had been in existence, under the direction of Mr. W. S. Purchon, M.A., A.R.I.B.A., and thanked the City Council, through the Lord Mayor, for founding and developing the School, and expressed the hope that before long it would be possible for the students to work for University degrees.

The Lord Mayor (Alderman W. H. Pethybridge, J.P.), who distributed the prizes, expressed high appreciation of the valuable services to the School of Messrs. Percy Thomas, F.R.I.B.A., Ivor Jones, A.R.I.B.A., Alwyn Lloyd, F.R.I.B.A., and Harry Teather, F.R.I.B.A., who have acted as honorary lecturers, and helped the School in numerous other ways.

A vote of thanks to the Lord Mayor was proposed by Mr. Percy Thomas, F.R.I.B.A., and seconded by Mr. J. H. Jones, Secretary of the South Wales Institute of Architects (Western Branch).

In proposing a vote of thanks to the Chairman, Councillor G. Fred Evans undertook to bring before the next meeting of the University College Council the suggestion with regard to the award of Degrees in Architecture.

The South Wales Institute of Architects, Central (Cardiff) Branch: Design, fourth year, first prize, B. W. Thomas; second prize, W. O. Oakley. Third year, first prize, V. Banks; second prize, J. B. Wride. Measured Drawings Prize, P. G. Budgen.

Department of Architecture and Civic Design: President's Prize for Draughtsmanship (presented by Mr. Percy Thomas, F.R.I.B.A.), V. Banks; The Architectural Sketching Prize (presented by Mr. H. Teather, F.R.I.B.A.), J. B. Wride; The Architectural Construction Prize (presented by Mr. Sidney Williams), F. W. Harper; The Batsford Prize for Architectural History (presented by Messrs. B. T. Batsford, Ltd.), E. B. Byrd; Civic Design Prize (presented by Mr. Alwyn Lloyd, F.R.I.B.A.), D. J. Williams; The Working Drawings Prize (presented by Mr. Ivor Jones, A.R.I.B.A.), V. Banks. Certificate in Architecture (carrying with it exemption from the Intermediate Examination of the R.I.B.A.): V. Banks (with distinction), James B. Wride (with distinction), Harry A. Barton, E. B. Byrd, F. W. Harper.

MEETINGS

FRIDAY, *December* 12.

London Society.—Major H. Barnes on "Bridges of London." 18, John-street, W.C.2. 5 p.m.

Town Planning Institute.—Mr. F. Marsden on "Bradford Town Planning Schemes." At 92, Victoria-street, S.W.1. 6.30 p.m.

MONDAY, *December* 15.

Royal Institute of British Architects.—Mr. A. J. Davis on "Shop Fronts and their Treatment." At 9, Conduit-street, W.1. 8 p.m.

Surveyors' Institution (Junior Section).—Mr. F. W. Kuphal on "Town Planning in Existing Cities." 6.30 p.m.

WEDNESDAY, *December* 17.

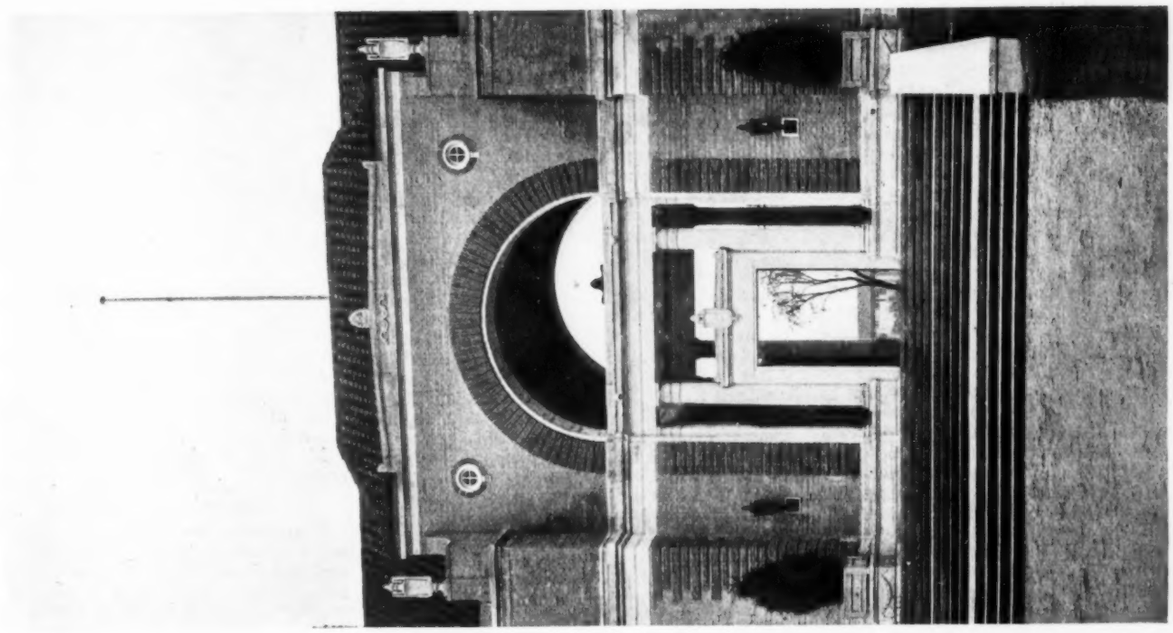
British Society of Master Glass Painters.—Mr. B. Rackham on "Stained Glass at the Victoria and Albert Museum." At 6, Queen-square, W.C.1. 6 p.m.

Edinburgh Architectural Association.—Professor L. B. Budden on "Future of Architectural Education." At 15, Rutland-square. 8 p.m.

THURSDAY, *December* 18.

Architecture Club.—Dinner. At Hotel Cecil, Strand, W.C.2. 7.30 p.m.

DETAIL OF EAST FRONT.



THE MEMORIAL ARCH.

Clare College, Cambridge. SIR GILES GILBERT SCOTT, R.A., Architect.

THE ENTRANCE TO THE MAIN BLOCK.

LEADING CONTENTS

	PAGE
SAVE THE CITY CHURCHES	923
NOTES	924
GENERAL NEWS	926
COMPETITION NEWS	926
CORRESPONDENCE	928
ARCHITECTURAL EDUCATION.—III	929
EXHIBITION OF AMERICAN WORKING DRAWINGS	930
BRISTOL SCHOOL OF ARCHITECTURE	930
SOUTH WALES INSTITUTE OF ARCHITECTS	930
MEETINGS	930
WESTMINSTER ABBEY RE-EXAMINED.—X	939
SHEFFIELD	943
THE TREND OF MODERN TOWN PLANNING	944
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	945
THE WEEK IN PARLIAMENT	946
THE BUILDING TRADE	947
CONCRETE AND CEMENT AS DECORATIVE MATERIALS	948
HOUSING REPORT OF BOROUGH TREASURER, NEWPORT	949
A HOUSING SUGGESTION	950
THE PRIME MINISTER ON HOUSING	950
WORKMEN'S COMPENSATION	952

ILLUSTRATIONS

New Nottingham Exchange Scheme.

This scheme, the illustrations of which we give this week, was unanimously adopted by the Nottingham City Council on December 1. The site comprises an area of approximately 4,260 square yards. On the western frontage is the Market-place, an open space of about five acres; on the Smithy-row frontage the site extends to the boundary of the land which will be occupied by the National Provincial Bank when these premises are rebuilt in connection with the widening of High-street. The site extends to the centre of the High-street frontage, with sufficient width to provide an entrance to the Arcade, with small shops on each side. On the Cheapside frontage the site extends from the building recently erected by the Commercial Union Assurance Company to the Market-place frontage, opposite Exchange-walk.

The widening of High-street will be continued at its new width of 60 ft. Smithy-row will be widened, the building line being improved; the very irregular frontage line of Cheapside will also be straightened, and the thoroughfare considerably improved. The site is of good proportion, and the scheme has been treated on bold and simple lines. The whole of the upper floors of the front portion of the site, west of the Arcade and facing the Great Market-place, together with adequate areas of the ground floor and basement, will be used entirely for civic purposes.

On the Great Market Place front a loggia treatment will be introduced, and the main entrance vestibule approached from this loggia will lead into a large entrance hall. On each side of this hall there will be controlled cloak rooms for ladies and gentlemen, and these cloak rooms will have private staircases leading to retiring rooms in the basement. Leading from the entrance hall will be the grand staircase hall, with its wide central marble staircase and electric elevators on either side.

The whole of the first floor on the western side of the arcade will be used for civic receptions. From the grand staircase a reception lobby will lead into the pillared reception hall (82 ft. by 42 ft.), stretching across the main front and overlooking the Great Market Place. In the front of the reception hall and leading from it there will be a wide open terrace with a Speaker's projecting balcony. At one end of the reception hall there will be a gallery for guests, and at the opposite end a musician's gallery with the necessary retiring rooms for artists. Leading from the reception hall and the grand staircase will be the dining room (56 ft. by 28 ft.). Overlooking Smithy-row, and approached from the grand staircase, will be the Mayor's quarters, which consist of a waiting room, the Mayor's parlour, and a private room. A large service room, served from the kitchens by electric lifts and a private staircase, will be suitably planned so that the uses of the dining-room and the reception hall could be conveniently reversed. Overlooking the main arcade will be the staircase leading to the second floor.

The second floor will be reached by two large electric elevators in addition to the staircase, and this floor will be used for the work of the Council. The Council Chamber will be situated on the main front, surrounded by a corridor and two lobbies for members. The chamber will have a seating capacity for 108 members, with space for the necessary officials. A gallery will be arranged for the public, and a special gallery with a private room will be planned for the Press. The semi-circular plan adopted for the chamber will have the advantage of placing the Mayor within a minimum distance of all members. The chief entrances to the chamber will be from the members' lobbies, and adjacent to the lifts there will be a private entrance for the Mayor. On the southern front there will be a large ante-room (39 ft. by 28 ft.), and on the northern front the members' room and library (39 ft. by 28 ft.). Surrounding the Council Chamber, small private rooms will be arranged, including small rooms for the Mayor, the Sheriff, and the Town Clerk.

The third floor will be planned with the necessary kitchens and administrative stores for the whole of the civic quarters. This floor will have two private lifts and staircases direct from the special entrances in Cheapside and Smithy-row.

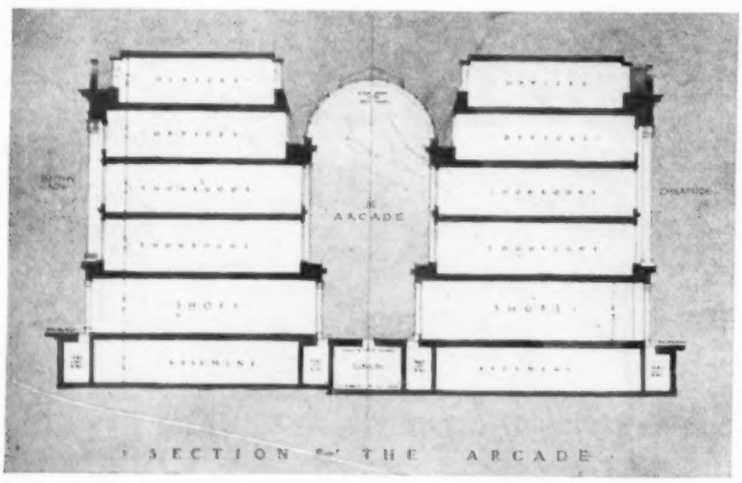
The back portion of the site will be developed to provide the maximum amount of shop frontage. Two large shopping arcades of considerably greater proportions than any other arcade in this country will be provided to give communication between Smithy-row, Cheapside, and High-street. The arcades will be 60 ft. high, with an effective width of 28 ft.

The existing buildings on the site have a shop frontage of only 350 ft., whereas the proposed scheme offers a shop frontage of approximately double the present amount, viz., 753 ft. A development on the lines suggested concentrates the administrative work for the shops into the basement, and allows the fullest value to be obtained from the ground floor space. The important point of an adequate goods entrance for each shop will be dealt with by the introduction of a wide subway under both the arcades, and from the subway an entrance to the basement of each shop will be provided. The subway will be fitted with two extra large goods elevators at the main entrances, and the use of these could be restricted to certain hours if found desirable. In addition, at the south-eastern corner of the site in Cheapside there will be an inclined road suitable for trolley traffic leading into the subway. The whole of the space for shops on the ground floor will be constructed so as to allow the greatest possible scope in sub-dividing the area, varying from the small lock-up shop of, say, 18 ft. by 15 ft., with a small basement, up to a large shopping store of, say, 115 ft. by 50 ft., comprising five or six floors in height. Between the main piers, the shop fronts will be arranged exactly as desired by the various tenants, and the internal divisions for the shops will be as light as possible to conform with the usual fire insurance regulations.

The division of the site by arcades will render the upper floors very suitable for showrooms or offices, and this division will have the advantage of giving a maximum number of front rooms as compared with the usual development with internal wells or light areas. The outer wall surfaces of these rooms will be arranged with a very large percentage of window space to ensure a maximum amount of light and natural ventilation.

The building will be erected in Portland stone. The shop fronts and the upper windows will be in metal with uniform bronze letters on the shop fascias. The various apartments in the civic quarters will be finished in a manner to give the correct expression required in each room. The whole of the building will be steel framed with fire-resisting floors.

Mr. T. C. Howitt, D.S.O., A.R.I.B.A., is the architect.



Proposed New Exchange, Nottingham.
MR. T. C. HOWITT, A.R.I.B.A., Architect.

Clare College, Cambridge.

We give this week several illustrations of the new memorial buildings at Clare College, designed by Sir Giles Gilbert Scott, R.A. They form the first portion of a new court, made possible by the gift of £12,000 by Colonel A. S. Banham, C.M.G., in memory of his son. The new buildings were opened on Armistice Day by Lord Balfour, Chancellor of the University and Visitor of the College.

Messrs. Coulson & Son, Ltd., Cambridge, are the contractors.

Dundee School Competition.

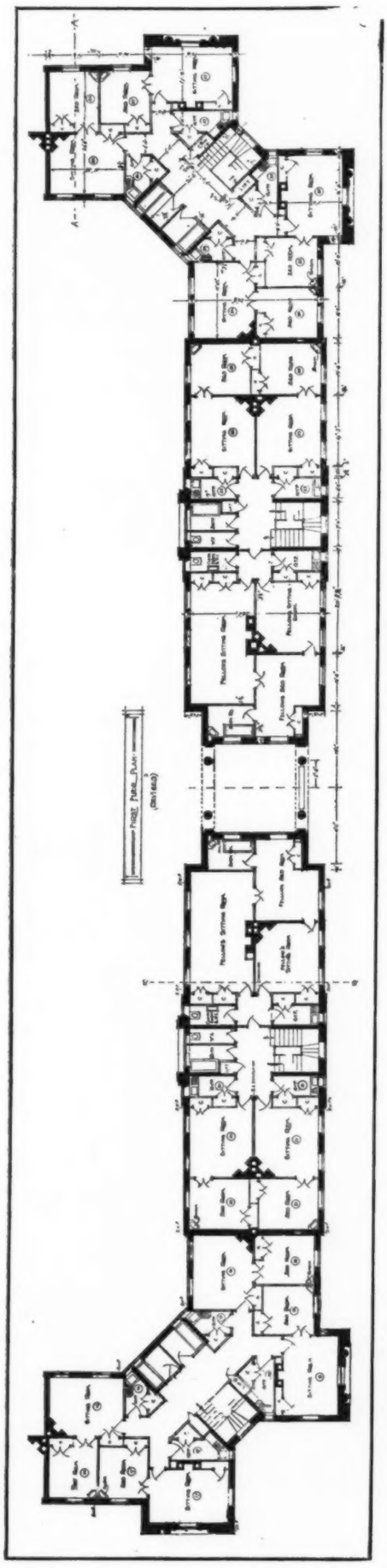
We give this week a perspective drawing of the proposed new school at Dundee. This drawing is a perspective of the design submitted by Mr. Chas. G. Soutar, F.R.I.B.A. (Messrs. Maclaren, Soutar & Salmond), and placed first in the recent competition. Other drawings of this design were given in our issue for October 17.

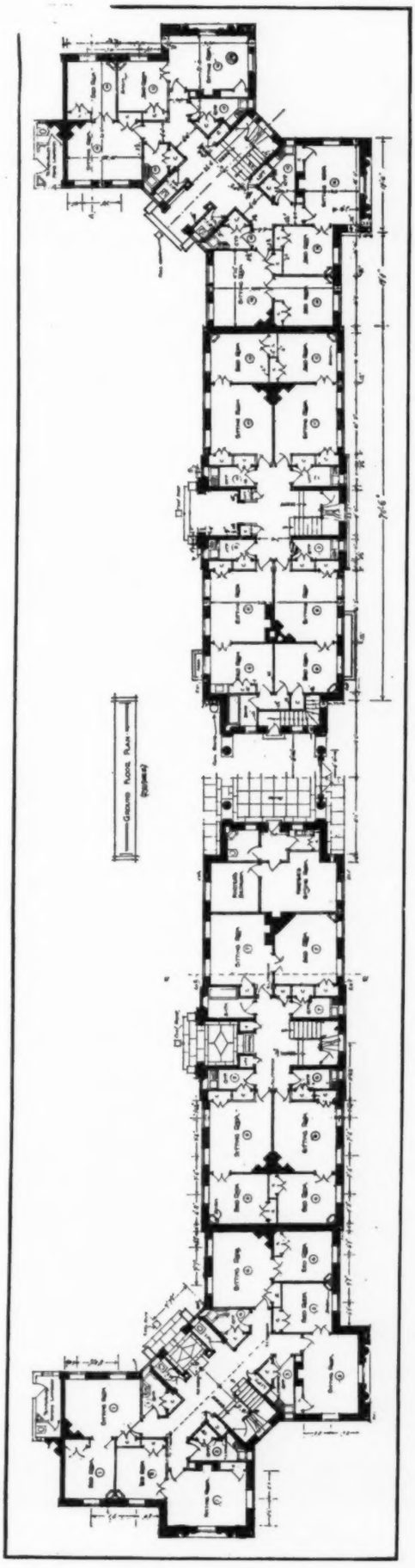
London Hotel Competition.

The sketch of the centre block of the proposed "Royal" Hotel, Woburn-place, is part of the design by Mr. C. A. Rowbotham, placed first in this recent competition. The length of the hotel is some 700 ft. The original scheme was to have been carried out in cream-white terra-cotta, but the actual facing material is now under discussion.

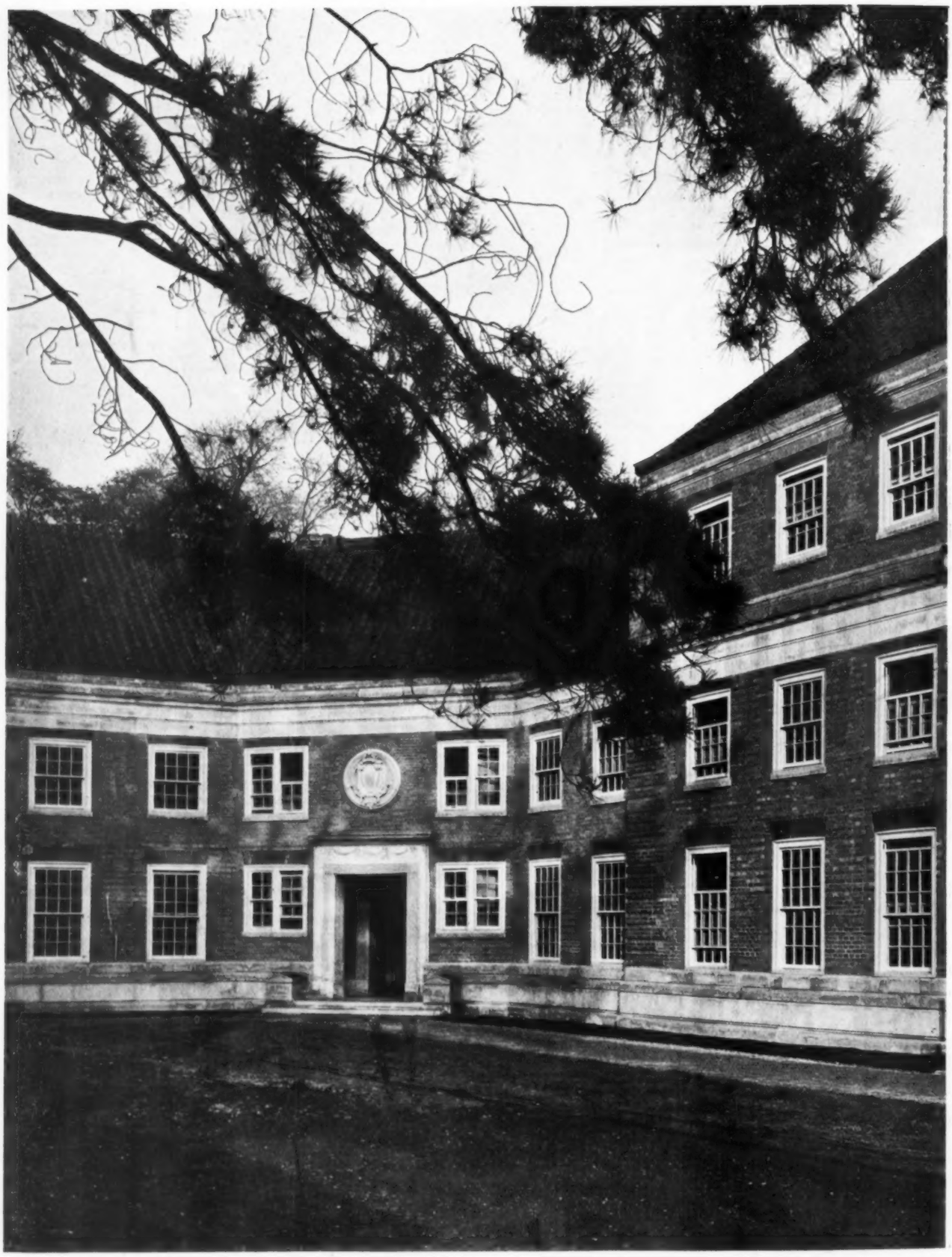
The Chenil Galleries.

In reference to our description of this work in our issue of the 28th ult., Messrs. Stuart's Granolithic Co., Ltd., inform us that they were responsible for the cast stone-work to some of the elevations.





Clare College, Cambridge. SIR GILES GILBERT SCOTT, R.A., Architect.



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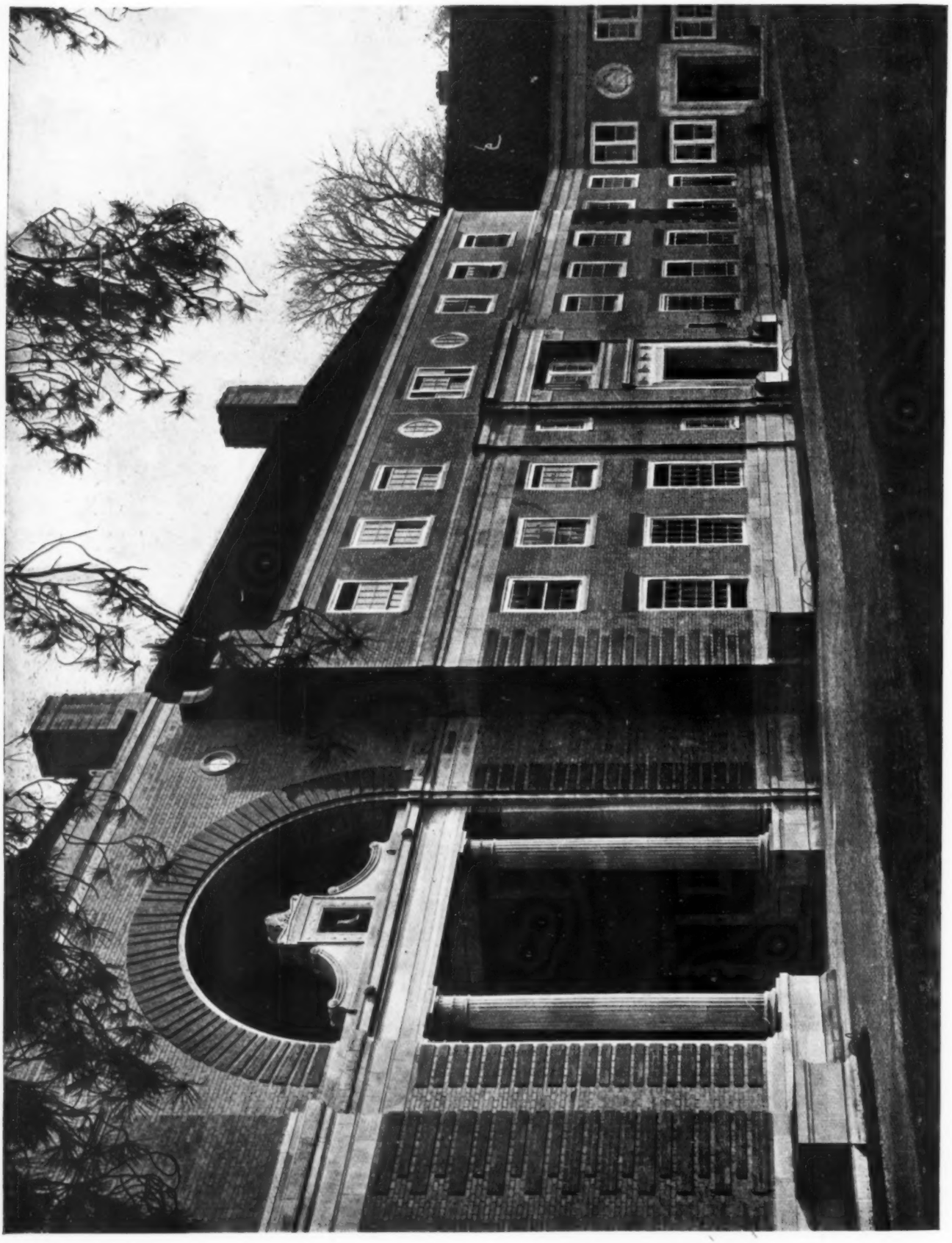

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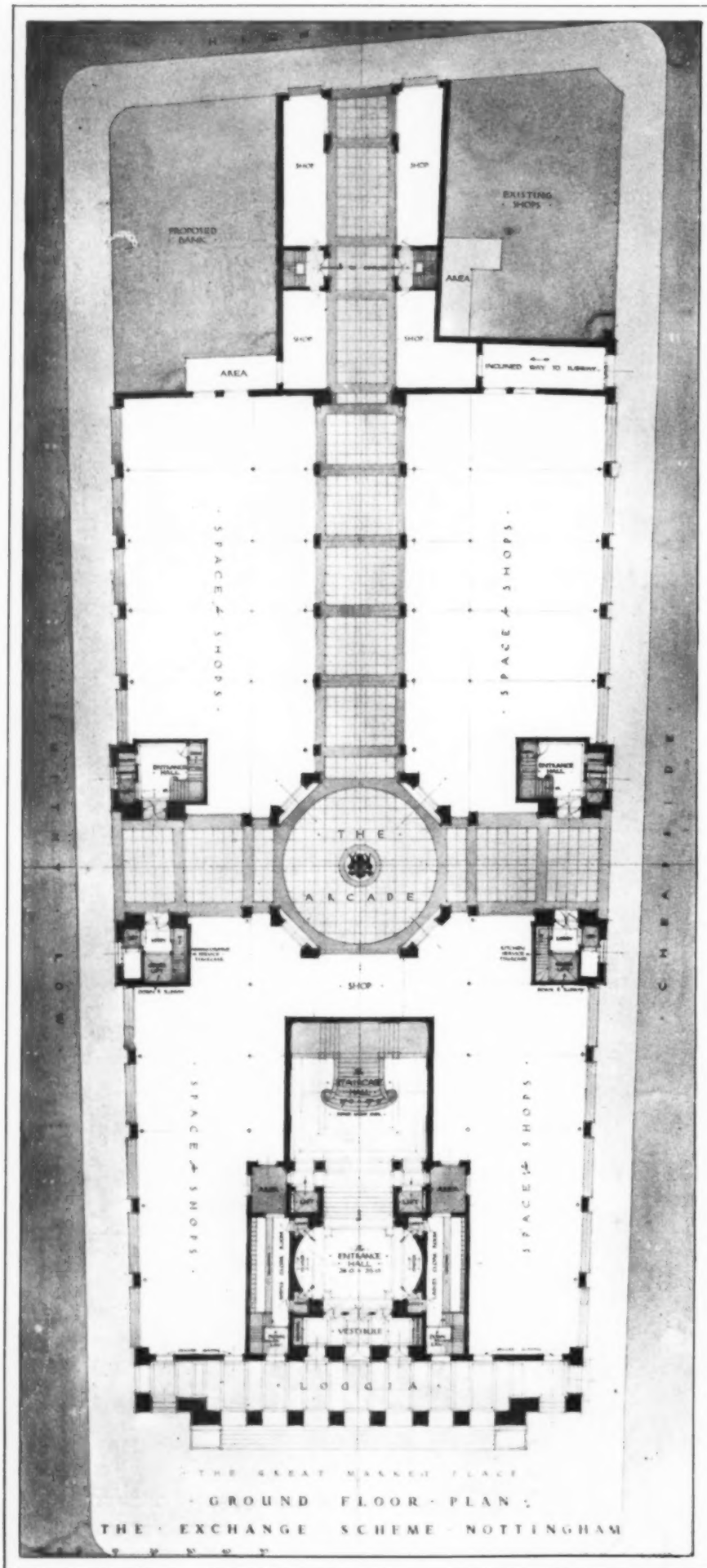
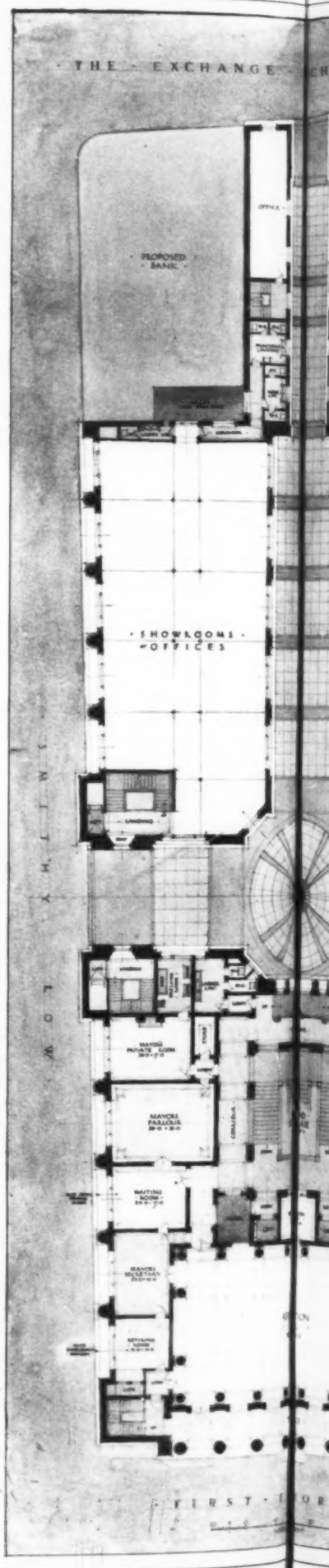
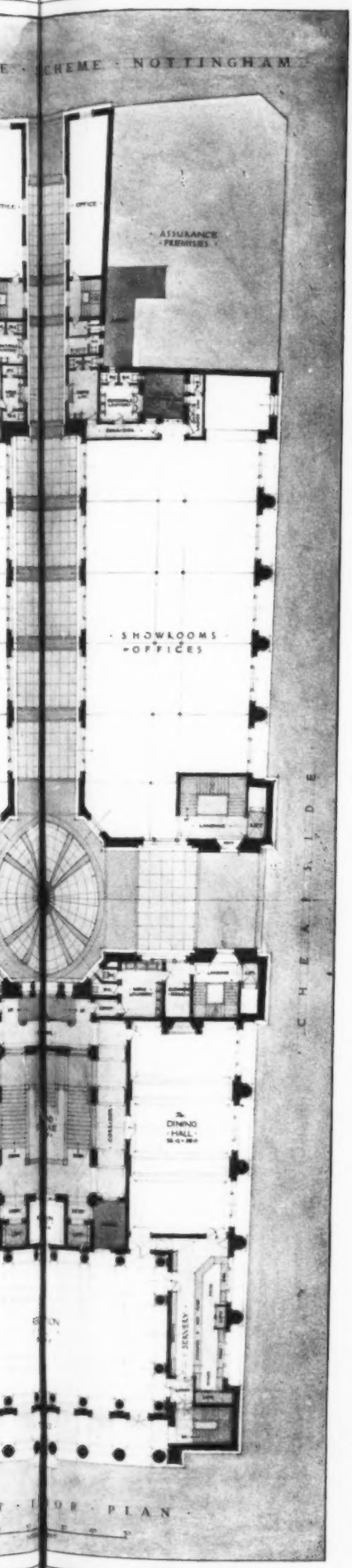
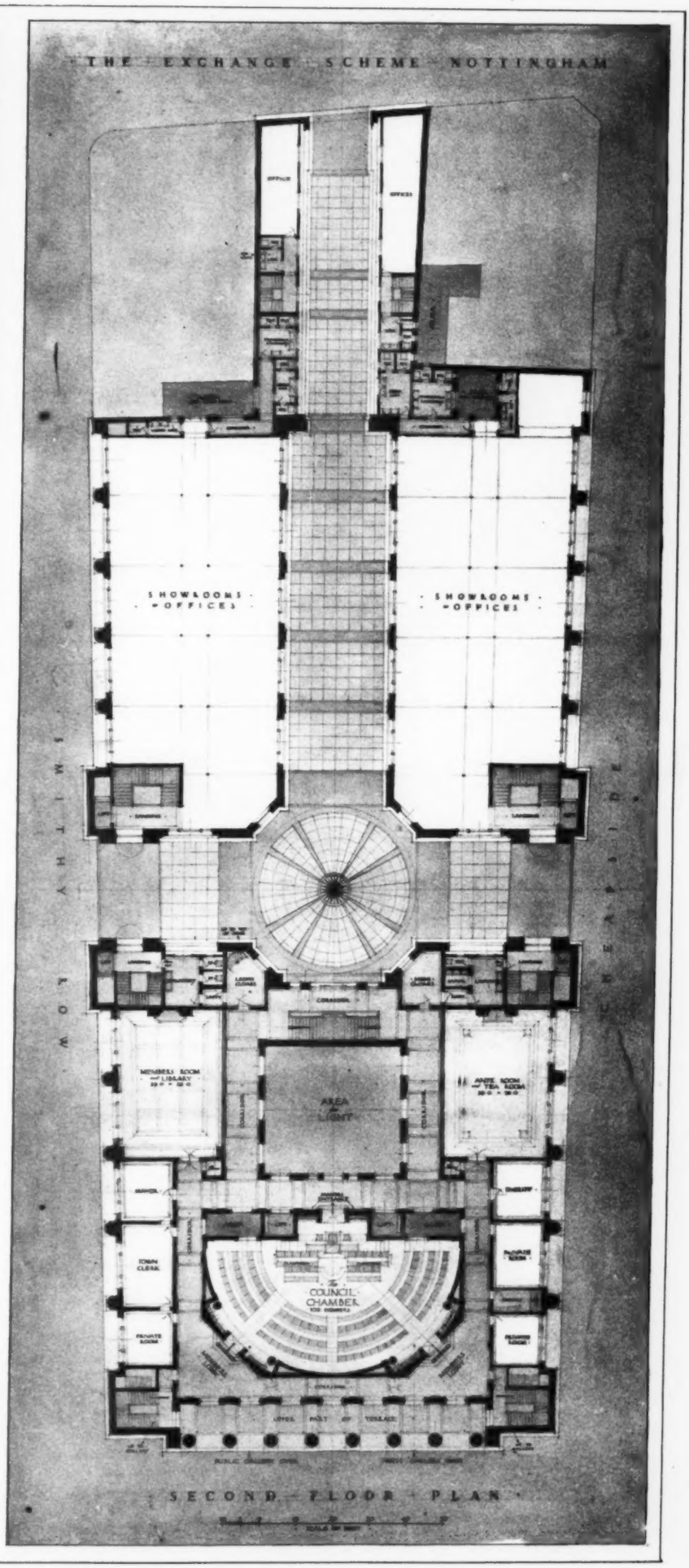




THE PROPOSED NEW EXCHANGE, NOTTINGHAM.

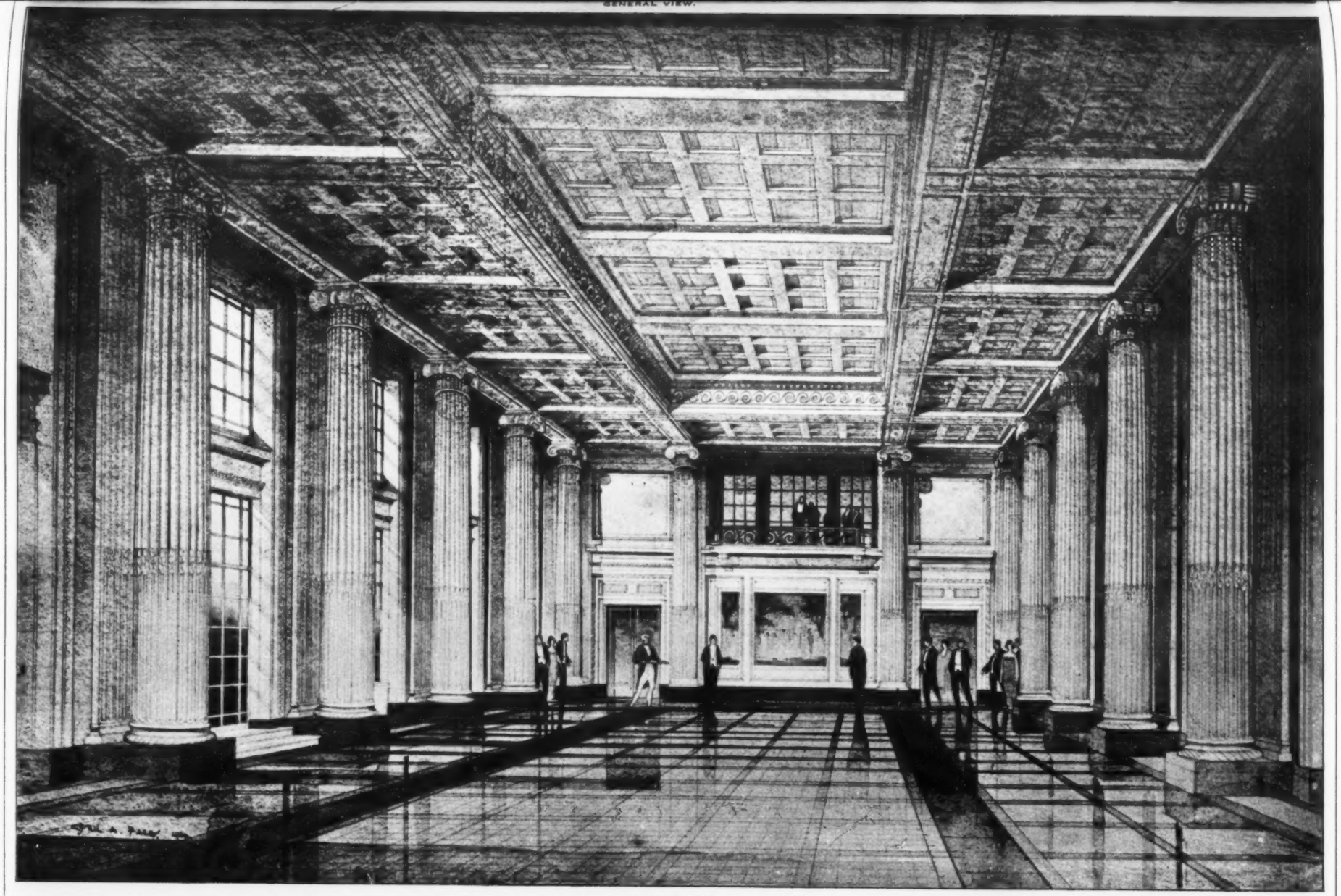




NOTTINGHAM. MR. T. C. HOWITT, A.R.I.B.A., ARCHITECT.

GENERAL VIEW.

GENERAL VIEW.



RECEPTION HALL.

THE PROPOSED NEW EXCHANGE, NOTTINGHAM. MR. T. C. HOWITT, A.R.I.B.A., ARCHITECT.

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Clare College, Cambridge : East Front. Sir Giles Gilbert Scott, R.A., Architect.

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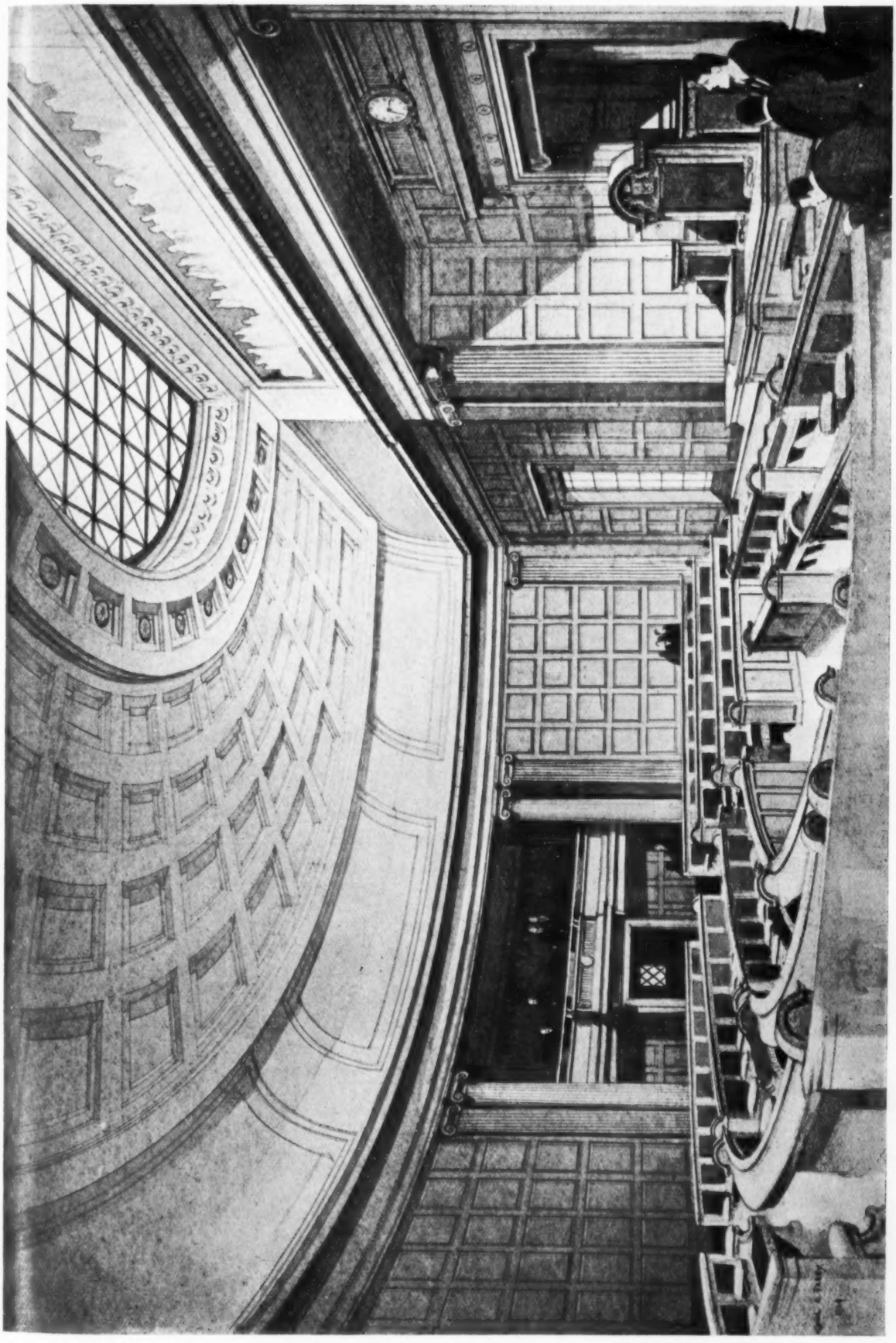
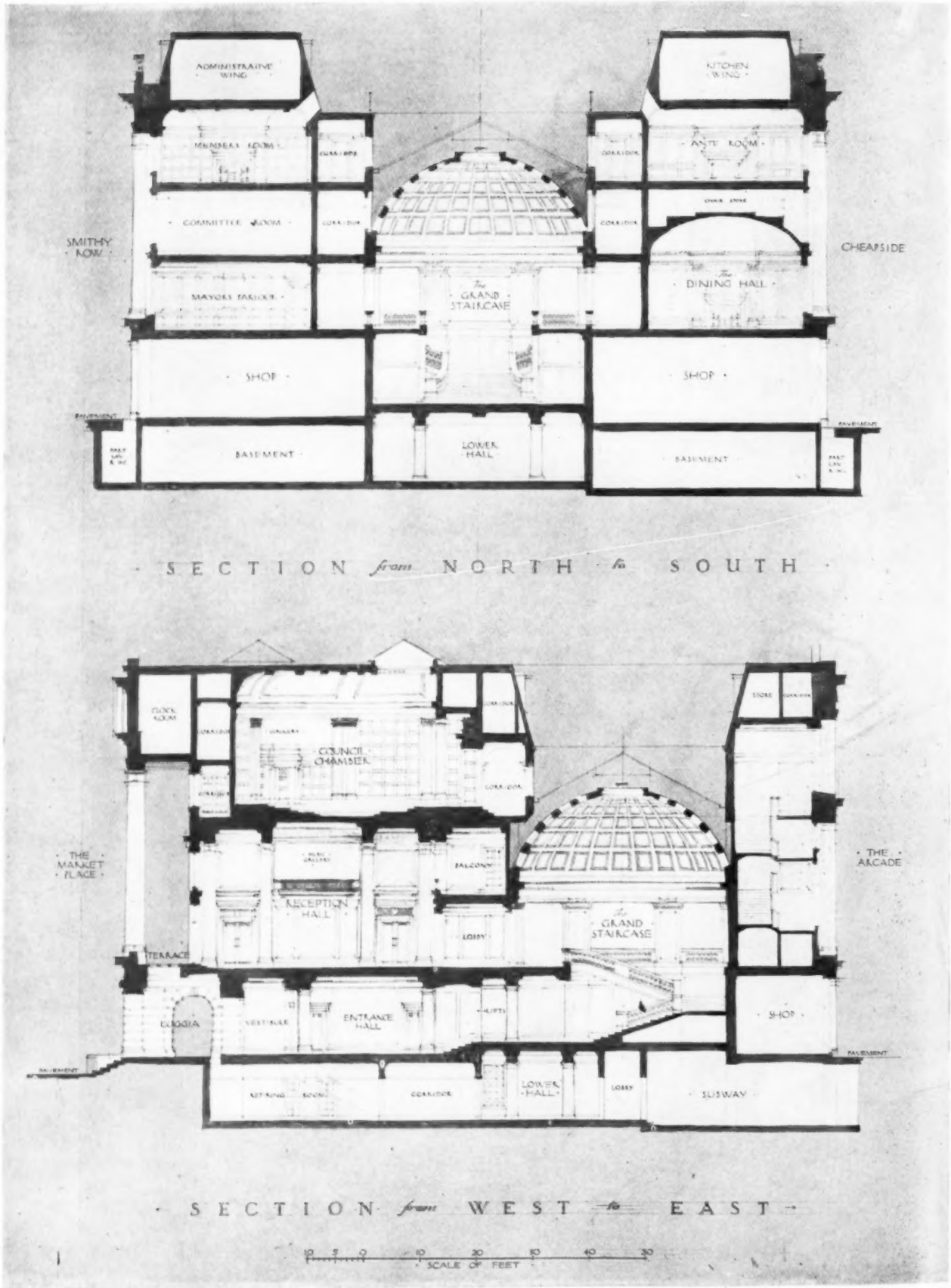


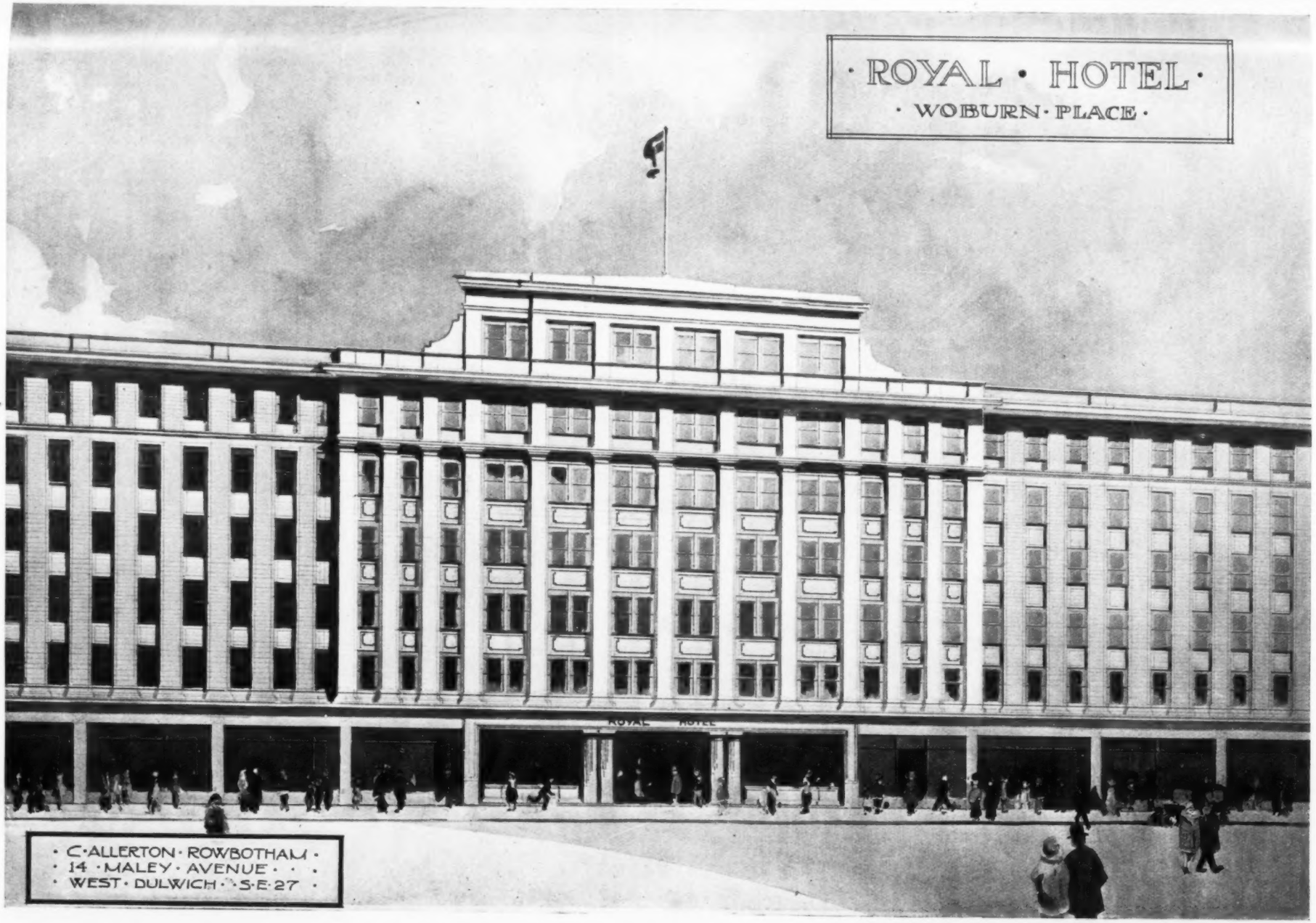
THE COUNCIL CHAMBER.

The Proposed New Exchange, Nottingham. MR. T. C. HOWITT, A.R.I.B.A., Architect. (*See p.* 932.)



The Proposed New Exchange, Nottingham.

MR. T. C. HOWITT, A.R.I.B.A., Architect. (*See p.* 932.)



London Hotel Competition. Design placed First: By Mr. C. Allerton Rowbotham.

Dundee School Competition.

Selected Design: By Mr. Chas. G. Soutar, F.R.I.B.A. (Messrs. Maclaren, Soutar & Salmond).

WESTMINSTER ABBEY RE-EXAMINED.—X

By W. R. LETHABY.

MOSAICS AND STAINED GLASS.—PART II.

From many precise orders recorded in the "Liberate Rolls," it appears that Henry III had a special love for stained glass. In 1237, for instance, a command was issued "to make a chamber with beautiful glass."

There is evidence to show that the King must have glazed his church at once with stained glass. Much of it was ornamental, for figure work, as usual, would have been reserved for special positions. Most of it, too, was very fair, either "grisaille" just touched with points of colour, or white quarry work. The glass was attached to wooden frames in the lights. Several window irons in the foiled circles still retain "lugs" to which the leaded glazing was attached by wedges, some of which have actually been found. In two of the traceried compartments of the north walk of the cloister such irons with lugs may easily be seen. The early glass at Canterbury was fixed in the same way. The window lights are of large scale varying in width from about 3½ ft. in the apse to 5½ ft. in the north bay of the aisle of the north transept.

Grisaille.—Some precious fragments of the original stained glass, which used to lie in the triforium, were in 1908 carefully framed and put up in a window in the west aisle of the north transept. There are about 20 ft., being portions of three different patterns. They were taken out of one of the south-east apsidal chapels in Scott's time and show what the glazing of those chapels was. Set up as they now are it is easy to see how the patterns were arranged to fill the lights. (Fig. 1.)

When I gave some sketches of the details before, I did not allow for the exceptional width of the window lights; the patterns would have been arranged as in Figs. 1 and 2. This doubling of the units agrees with windows at Salisbury and elsewhere. Fig. 3 is a diagram of the third variety. Full-sized drawings of

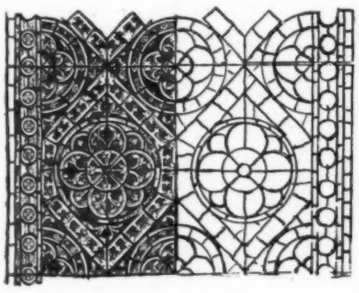


FIG. 1.

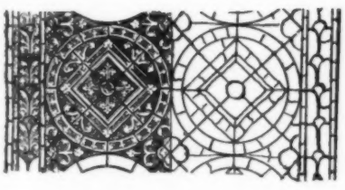


FIG. 2.

this beautiful grisaille glazing made many years ago may be found in the Print Room of South Kensington Museum.

Shields.—The glass now in the windows of the apse, besides containing some late mediæval figures, have backgrounds made up in part of fragments dating from the thirteenth to the seventeenth century. When these windows were taken out in 1916, I was able to draw many ancient quarry patterns and three beautiful shields. (This glass may now be studied in photographs sold at the Victoria and Albert Museum.) The three early shields of arms which now exist are those of Henry III, of his wife Eleanor of Provence, and of Richard of Cornwall

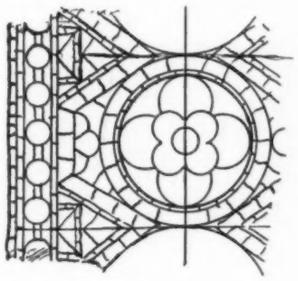


FIG. 3.

(his brother). They are about 16 in. high and are precious examples of the earliest heraldic glass which we have; they are probably twenty years earlier than the similar Salisbury shields. The King's shield is, fortunately, very complete, and so is that of Cornwall. Figs. 4 and 5 show these, and Figs. 6 and 7 are enlarged details. The Queen's shield is in worse condition, but

FIG. 4.

FIG. 5.

enough remains to allow of a drawn restoration being made. There were four red pallets on a gold ground. Three pieces of deep yellow glass, which are still associated with the red

much "made up" later glazing of the high apsidal windows are a large number of early fragments, including several varieties of thirteenth-century quarries. These, according to

FIG. 6.

stripes, are patterned a good deal like borders, and examination shows that they are, in fact, parts of the diapered golden field on which the ruby pallets were charged. In Fig. 8 the three

the early custom, are squares which were set diagonally. This is shown by analogy with examples at Lincoln, &c., and also by the fact that some of the pieces seem to have been half

upper pieces of diaper pattern are original. From records we know that such shields were set in the ground story windows, which we have seen were of grisaille glass; at Salisbury, some of the windows were practically copies of those at Westminster, and these had two shields to a light.

Sandford records that there remained many royal shields in the windows of the Westminster Church and Chapter House, and mentions particularly that one of Eleanor of Castile was in the aisle of the north transept. The ground floor windows, we may suppose, were mostly of this lovely kind of "jewelled grisaille," with pairs of shields set on the lights. In the British Museum (MS. Lansdowne, 874) are sketches of about a dozen of these shields on a sheet signed William Camden. Here, besides the three now existing, are England with a label (for Prince Edward); the castles and lions of Castile and Leon and the three bends of Ponthieu (both for his wife Eleanor); the black eagle of Germany (for his brother Richard of Cornwall); the cross and birds of the Confessor; and the three chevrons of Clare and the quarterly coat of De Lacy. Some were twice repeated. Fig. 9 shows the varieties other than the three existing ones. The selection of arms must mark a date earlier than the death of Henry III, and the three now existing in the apse windows were doubtless made before the consecration of the church in 1269. In the orders of Henry III shields of arms in glass are frequently specified.

Quarries.—Following a usual custom the clerestory windows were probably simpler than those below, as at Salisbury and York. In the

quarries. One of these early quarries was found in my time at the clerestory level on or in the masonry. For similar quarries, see Winston, plate 31, Fig. 15. "The quarry is generally bordered on all or only two of its sides." These windows of diapered glass also probably had one or two bright heraldic shields set in each light. See Figs. 10, 11 and 12; 13 may be from a border, and 14 shows two fragments.

FIG. 7.

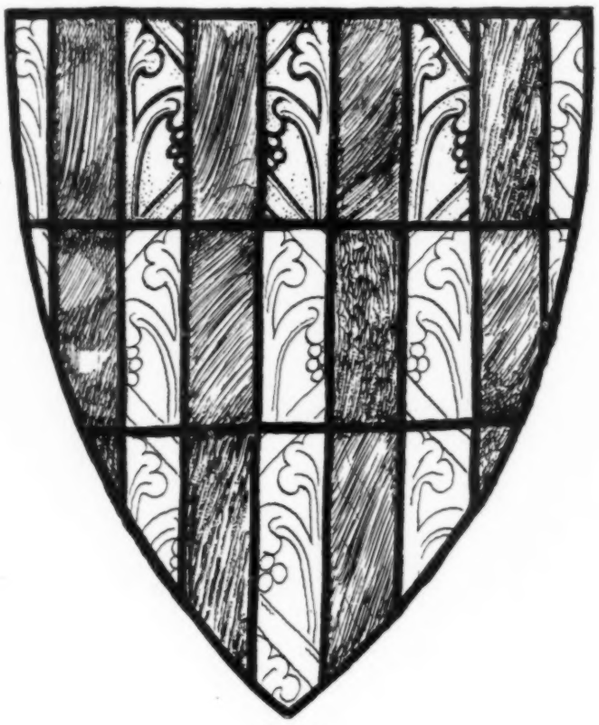


FIG. 8.

Kings.—Among the fragments in the east of the central knops and two or three of the low intermediate ones exist, but I have not found any part of the end knops. These crowns must have been 12 or 13 in. wide, and the figures which bore them can hardly have been less than 8 ft. high. Exactly similar jewel patterns to those on the circular bands are found on the early glass in Jerusalem Chamber. A further most interesting point is the form of the knops, which are roses. As we have seen before, rose decoration was a special characteristic of the work of Henry III; roses appear on his coins and the Chapter House inscription shows that he was a rose admirer. The large figures which wore these crowns can hardly have been anywhere else than in the apsidal windows, and we reach the conclusion that there was a King in each of the lights. Possibly they were the saint Kings of England, among whom Edward and Edmund would appear; or the founders, Edgar, Edward, and Henry III himself, may have been included. These figures would have been named by inscriptions, and there is at least one fragment existing in the present windows of an early letter (R ?) which must have been full 6 in. high (Fig. 16). There are also other fragments of later naming inscriptions in black letter as big or bigger. Such large standing figures are well known in France; those around the apse of Notre Dame, Paris, were some 16 ft. high; a set of Kings, if I remember aright, were (I had written "are," forgetting the war) in the Clerestory windows at Reims. One of the figures at Westminster would assuredly have been the Confessor, and taking a large contemporary painted head of the white-haired King in the Cloister at Windsor as a guide, I can "see" him in his place appearing above his golden coffin.

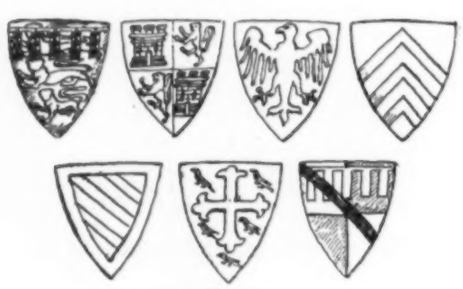


FIG. 9.

FIG. 11.

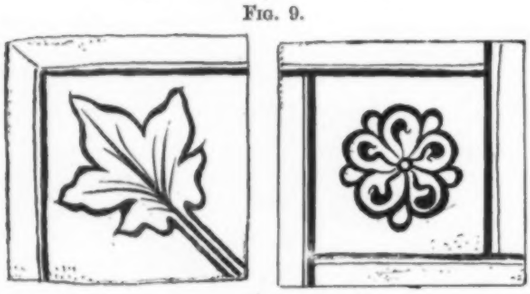


FIG. 10.

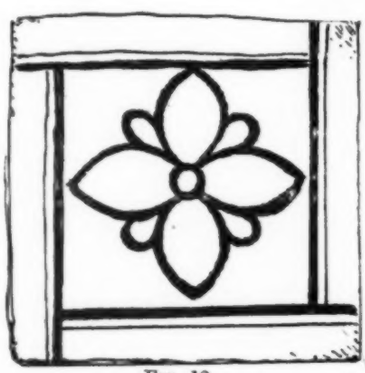


FIG. 12.

wndows are also some pieces of large crowns, on deep golden glass, which are certainly of mid-thirteenth-century style. Fig. 15 is a restoration of one of the crowns; three or four

Medallions. — In Jerusalem Chamber are preserved, set in its big northern window, seven pieces of the finest thirteenth-century medallion work with small figures. These precious panels are first described in *Archæologia*, 1834, but they must have been here long before.

They appear in an engraved view of the Chamber while it was in the Strawberry Hill style, and on one of the panels (St. Nicholas) is scratched "Wm. Miles, glazier, May 12, 1794." Now on one of the apsidal windows in the church is scratched "Wm. Miles, No. 20 Tufton Street, Westr., Repaired this, 1797." On the same panel in the Chamber other glaziers have

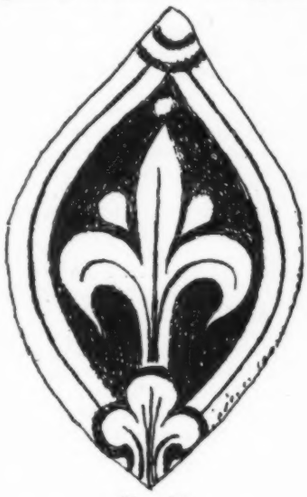


FIG. 13.

put their names and the dates 1762 and 1746, while on another (Murder of the Innocents) is written "Thomas Manning [?] glasd. this win. 1680." Winston dated these medallions c. 1250–70, and we may be confident that they were part of the original glazing in place when the church was consecrated in 1269. They are

FIG. 14.

from windows of big scale, and could only have come from a church of the first rank. The subjects show that they were parts of special "theological windows" in such a church. Two of the panels form a pair which would require a light from 4 to 4½ ft. wide, and the other medallions associated in pairs (compare Fig. 1) would be suitable for such lights.

The two panels, which make a pair, are of the form shown in Fig. 17, and they contain as subjects the Ascension and Descent of the Holy Spirit. In the centre of the former stands the Virgin with Apostles on either hand, and the feet of the ascending Christ appear above. The second panel has eleven Apostles with the head and wings of the descending Dove, from which fall red streams—the tongues of fire. The pair were bound together by a quatrefoil containing coloured foliage, and the filling

FIG. 15.

between the medallions would doubtless have been of the same kind. A third piece is a circular medallion (1 ft. 9 in. diameter) of the Resurrection. Christ rises from the Tomb holding a long Cross and having a ruby nimbus crossed with white. At the head and foot of the tomb is an angel, a very pretty pair, and

FIG. 16.

the whole is as good as may be. From the subject we may suppose that this medallion was associated with the pair just described; they may have been arranged as in Fig. 17. This type of arrangement is found in France and at Canterbury, Beverley, and Salisbury (Fig. 18). There are drawings of two or three of these

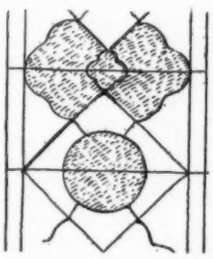


FIG. 17.

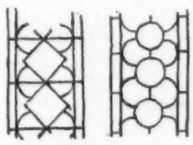


FIG. 18.

panels in the Winston collection at the British Museum, made in 1839–43, and these are valuable as evidence of condition before restoration.

The fourth and fifth panels are pointed quatrefoils about 2 ft. by 1½ ft. These contain St. Stephen's stoning and the execution of St. Paul, and they doubtless belonged to one light devoted to St. Paul or SS. Peter and Paul.

The sixth panel is a pointed oval, and contains the Murder of the Innocents. This belongs to the Infancy group of subjects, and probably occupied a separate light. A persecutor in one of the panels has a monk's head. Was this leaded up by mistake, as Winston supposed, or is it a craftsman's malicious joke?

The seventh panel is of similar form but different size; the subject is St. Nicholas and a drowning man, and it must be from yet another light. The sea is formed of wavy bands of blue and white.

These medallions all have blue backgrounds and ruby outer borders, with an inner strip of white pearling; nimbuses are red, green, yellow and white. Hems of the garments of Christ and Apostles have jewel patterns. Fig. 19 is a figure of the Virgin in the Ascension group.

In the later windows many small pieces are leaded in which may have come from "mosaic" grounds of medallion windows. Some medallions at Lincoln have similar borders to ours. One of these is illustrated by Winston with part of the surrounding ornamental foliage; such foliage would have formed the filling between our medallions. This glass must have been in some place of honour, possibly in the Lady Chapel or in the windows of the south transept directly opposite the gallery which, I suppose, was the King's pew. By comparison with Lincoln and Salisbury, we may form some imaginative thought of the fair interior full, flooded with light through windows mostly of pearly white heightened here and there to dazzling splendour of colour.

We probably learn who was the glazier of the church at the time of its consecration from a charter witnessed by Robert de Beverley (the mason), Edmund, goldsmith, and William le Verrer, in 1272.

Later Glazing.—In the east and west windows are several small fragments of fourteenth-century glazing, such as oak-leaf borders. Fig. 20 is from a piece of fourteenth-century grisaille found in 1907 over the vault of the south walk of the cloister. It may very well represent the glazing of the refectory as transformed about 1350–60.

The new work of building the nave was begun in 1376, but went forward very slowly, and it is doubtful if any glazing was done for nearly a century. In 1462 an entirely new

FIG. 19.

rose window in the south transept was glazed by Thomas Pedeler for 1½d. a foot, except for the arms of England at the centre in colour, which was 4s. In 1469 two glaziers worked 92 days glazing two windows of the nave (probably the aisle). Glass of "Rene" and English glass are mentioned; also a plate of *auricalco* (brass) for grinding colours, an "anelyng herth" and "papiro" bought for the glaziers. The next year Thomas, the glazier, worked 42 days, and in 1489 a glazier employed in the church is still called Thomas.

From 1506 to 1510 the windows in the

western part of the church were glazed. In 1505–6, 3s. 4d. was paid to a glazier coming from Malvern to see the windows. In 1507–8 Richard Twyge, glazier, received £37 6s. 8d. for the glazing of fourteen windows in the upper story of the church. In 1509–10, Richard Twyge filled the great west window with glass, for which he received £44, and also

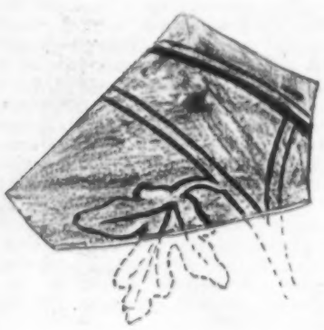


FIG. 20.

one window in the upper story for £3 (Rackham).

In April, 1643, Parliament appointed a committee to demolish monuments of superstition in the church. In May the copes were burnt. It was then used as a "preaching house," and bills for "cleansing out pictures" suggests much destruction of glass, although the only specific notice I find of this, apart from Henry VII's Chapel, is for 40 ft. of new glass in 1646 for a window next the "Redd-Door."

The nave at least retained many windows with figures up to the beginning of the eighteenth

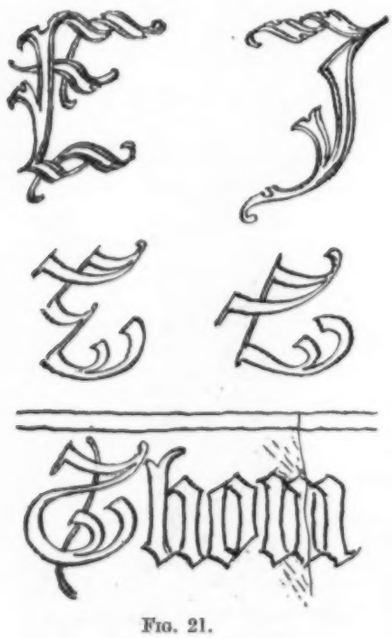


FIG. 21.

century, but any within reach seem to have been of the nature of royal portraitures. Hatton (1708) says that the windows of the nave were "finely painted but now ruined. The windows were adorned with various portraits, of which there yet remain such at the east and west ends, and many on the south side in the upper range westward from the cross roof; and in the south-west window below is the portrait of Edward the Confessor."* Hatton's text may have been written just before the transfer of the figures of the Confessor and the Pilgrim to the apsidal end, or he may have followed Caxton's Chronicle, from which it also appears that there was a representation of the Confessor giving his ring on the south side. Dart (1723) states that the story of the Confessor had been in the glass of the south aisle, but implies that it was no longer there. Another of these windows, according to Sandford, contained a portraiture of Richard II with his badge of the White Hart.

Gathering together the large stained-glass figures into the east and west windows appears to have been done by Wren, when most of the church was largely reglazed from 1700 to 1722.

Edward Drew was the glazier, and in 1700 he repaired 34½ ft. of painted glass "in the Spiritual Court." In this year ironwork was put to "the eight windows over the altar." A board was provided "to draw out the glass," and also a model of one of the windows. In 1701 "the lights of old glass in several places" were "fitted up." Much glazing now and later was done in Henry VII Chapel. In 1703 Edward Drew was paid for 1,650 ft. of new glass "in seven windows over the altar or shrine: which finishes the east end entirely above at 9d." These must be the seven clerestory windows of the Confessor's Chapel, so it appears that the stained glass was not yet there. In 1704, nine new windows on the north side required 2,202 ft. of glass. In this year an item appears for "new leading the figure of Edward the Black Prince in the west window and putting a border and the College arms under the same." This was the west window of the south aisle. In 1705 new glass worth £42 was used "for the great west window with twelve figures of old painted glass." According to Dart, the glass in the big west window was fragmentary in 1723.

In 1706 £70 was paid "for 566 ft. painted glass amended at the east end of the church." This must refer to the three stained-glass windows in the apse. The lights are here narrower than the average, and 188 ft. for each window seems a full allowance. Names and the dates, 1709–11–13–35 are scratched on these windows, which are here easily reached from the leads. That they were there from the earliest date is confirmed by entries in 1716: "For mending painted glass east end that the boys broke." "Six frames for the wires for the three painted glass windows at the east end over the altar." It is interesting to find windows protected at so early a time; the Westminster boys were already at it! In this same year other entries occur as follows:—"Taking down the old glass next the cloister garden" "Figure work done over mason's shed next to the east door" [of Nave? this is under the heading Spiritual Court]. "Work done in the belfrey [lantern] for a painted window taken down from top of the church and fitted up."

The three eastern apsidal windows have six large single figures in as many lights. They are surrounded by work which even from below is seen to be semi-modern, but the whole is of pleasant colour for the glass of which the added work is made up is mostly ancient. Even the figures in the first window are of the semi-modern kind.

The figures in the two central lights are ancient (sixteenth century) and of fine quality and colour. They represent the Confessor giving his ring to St. John disguised as a pilgrim. The King stands before a green curtain in a blue robe and crimson mantle. St. John, with blue mantle, is in front of a crimson curtain. The colours of the curtains seem to have been counter-changed in the backgrounds above them. The figures were about 7 ft. high and their nimbuses 1½ ft. in diameter. They stood on castellated pedestals. On the garments the distinctive letters E and J are scattered.

These two figures are very fine of their kind, the King being developed portraiture, the faces and hair highly wrought, and the eyes in three-quarter aspect with high lights. There is an approach to perspective in the pedestals and the curtains bent back behind the figures. These lights have a German look, and the initial letters which powder the garments seem to be of renaissance character (Fig. 21). These letters and a coarse damask pattern on a robe are ground through flashed ruby into the white glass beneath. The other two figures are also late, but they are in a more conventional glass painting manner. One looks like an Apostle; he is without headdress, carries a long staff, and seems to have had bare feet (a fragment is leaded in, out of place). The sixth figure is a bishop or mitred abbot, on his robes are letters E (possibly out of place) and C (?) ground into the flashed ruby glass (Fig. 21). These two lights must be nearly of the same date as the other pair. However, the second pair of figures does not seem to have been done to range with the middle pair; there are no curtains behind them and no pedestals for their feet.

In the work around the panels of ancient glass is a collection of fragments from the thirteenth to the seventeenth century. There are several broken inscriptions. One is Sanctus Greg . . . . . ecclesia . . . Two fragments which may have belonged together are the tantalising words—

Regina M . . . . . me fecit R . .
. . . therefo . . . anno re . . . . .

Can these be Margaret, wife of Henry VII and Richard Twyge, the glazier?

One fragment of inscription, Thom[as] (Fig. 21), appears from the initial to be by the same hand which ground out the bigger letters.

The making up of the glass to fit these lights is quite interesting, bold and workmanlike, yet with an effort to harmonise new work with the place and the old figures. Mr. Drew should find a place in the history of glazing.

A further record of the nave windows was given to me about 1910 by Dean Armitage Robinson. This is a photograph of a drawing, by Ashmole in the Gough Collection at the Bodleian, of two armed figures. It is inscribed: "A draught of the pictures of St. George and the Black Prince taken from a glass window in the South Isle at the west end of the Choir in Westminster Abbey." There is no doubt as to the identification of the former, for his name appeared in big black letter beneath. The second figure still exists in a badly repaired state with a new face in the S.W. tower, but it is good to have it authenticated. Neale quoted Walpole (1762) for the identification, but objected that the armorial surcoat had no label. The label, however, was there when the drawing was made and the figure seems to have been in perfect condition. It stands on a hexagonal base, which doubtless was the top of a pedestal somewhat similar to those under the central pair of figures in the apse, which probably ranged with it and its companion.

These two figures—St. George and the Black Prince—certainly filled the lights of one window; they match exactly; indeed they seem to have been drawn by the "trace and turn over" method. The St. George has gone where all glass goes, but the data are so full for these two figures that it might be worth while to make a reconstructed drawing of them.

It seems from the evidence that the nave aisles were glazed at a late time with a series of portraitures of English kings and patron saints. Above in the clerestory may have been ecclesiastics, and the second pair of figures in the apse could have come from this range. In this case, they are probably the work of Richard Twyge (1506-10), as may also be the figures of the Confessor and St. John. The west window in the N.W. tower is made-up as a companion to the Black Prince, but the figure here is like the semi-modern pair in the apse and was doubtless by Drew. Below it is a big portcullis with side chains and a handsome arched crown—a fine panel of Tudor work. From its scale this badge may very well have been in this light, which is probably part of the work of Richard Twyge (1506-10). There are other big badges in the east windows which were probably transferred from the west end.

Islip's Chapel, finished about 1530, had stained window panes. In Keepe's MS. volume, which I have, he says, "In the windows of the Chapell above, where several of the Kings and Quenes of England are placed in Effegie in divers presses [the waxworks] you shall find sometimes an Eye with the slip of a tree; then a great I with the aforesaid slip, and sometimes one slipping from a tree with the wordes in a label coming out of his mouth (I slip)." One of these

* According to Creel the Confessor's shield of arms was also in this window.

panes has recently been restored to the Abbey and is in the Jericho parlour window. (See also an illustration given by Malcolm and *Gent. Mag.* 1802, sup., p. 1,185.)

Malcolm's description of the glass in Henry VII's Chapel, published in 1803, before the great restoration, confirms my view that there were coloured badges in all the lower windows of the East end and in the aisle windows, too. The *northern* apsidal chapel "windows contain painted glass of the arms of Edward the Confessor, Henry VII his initials, a crown on a tree, with the red rose and *fleur-de-lys*." In the

FIG. 22.

at les the large west windows had "many panes of painted glass; and those on the sides have scraps still remaining. They are representations of the red rose, *fleur-de-lys*, a rose half red and half white, portcullis, and the initials H.R." All the existing badges as before said have now been gathered into the eastern chapel. The single prophet's figure in the east clerestory window was already in place. Fig. 22 is from a late quarry, and Fig. 23 is a fragment of background.

In connection with glazing, there are references to the Palace workshops. Thomas, of Gloucester, did some work in Westminster Hall, including "flourished glass" in 1398-9. John Prudde was appointed to "the office of glazier of our works" by Henry VI in 1433, to hold it as Roger Gloucester had held it with a shed called the "glazier's lodge" standing "upon the west side within our Palace of Westminster." Under Richard III, in 1484, "a house which John Prudde late had" within the Palace of Westminster is again mentioned (Brayley's "Palace," p. 337). For Prudde also see *Burlington Magazine* about 1912. A palace in the middle age was a school of art and university of crafts.

FIG 23.

The Richard Baxter Memorial.

A memorial tablet to the Rev. Richard Baxter, of Kidderminster and London, was unveiled in Christ Church, Greyfriars, Newgate-street, recently by the Rev. Principal A. E. Garvie, President of the National Council of Evangelical Free Churches. The tablet was designed by Mr. R. Palmer Baines, F.S.Arc., of Messrs. George Baines & Son, architects, Victoria-street, S.W.1.

SHEFFIELD*

THE scheme, started in 1916 for the betterment of the city of Sheffield, has advanced as far as the production of an authentic monograph. In this book the need for scientific research in the handling of municipal problems is ably demonstrated and the exact science of town development is made clear. The task of collecting statistics and of preparing maps and diagrams has been under the direction of Professor Abercrombie, assisted by a competent staff well versed in local details. It is to be hoped that the municipal authorities, supported by the people of Sheffield, will lose no time in putting the excellent proposals into effect on the lines suggested. The book is divided into two parts. The first is a Civic Survey based on conditions as they exist to-day; while the second part centres upon ideas for the improvement of the city and the retention of its urban amenities. The book opens with the picture of Sheffield, framed in an historical background connoting geographical and geological facts. It gives the reasons for the selection of the site and the start of the town's prosperity as a manufacturing centre. As the Professor states: "The natural conformation of the ground upon which the city of Sheffield is built has been at once the origin of its prosperity and the prime determinant factor of its growth." Plate I shows a plan of the city in its relation to the hilly region on the west and the plain on the east, and further on in the book stress is laid on the geography of the district, the geology and surface formation, the coal measures and the working of the same. It is made clear that Sheffield has been associated with the manufacture of steel knives from the Roman times. Fairbanks plan of 1771 and Bucks view, taken from the high ground of the Manor, with the spire of the Cathedral dominating the centre, afford a fair idea of the aspect of Sheffield a hundred and fifty years since. A very different view is presented to-day. Plate VI shows the historical growth of the city from 1736 to 1921, which growth is described in the text. In 1840 the first railway connection with Sheffield was made, but it was not until 1850-60 that the railway system was fully developed, when a fresh departure of local industry followed. From that time to the present Sheffield, like most other English manufacturing centres, has been allowed to grow without regard to the housing needs of its workers. In the concluding paragraph of the historical chapter there is an interesting reference to "the ingrained aptitude of the population for technical work, requiring a high degree of skill—what might be termed its 'Mass Inheritances.'" As Professor Abercrombie is careful to explain certain factors have assisted the receiving and maintaining of a tradition, not always by a direct line of workers. From a study of the plates and photographs forming part of the historical survey, information is gathered that the intensity of the urban development in proximity to open country is in marked contrast. It will be obvious, therefore, as the Professor's proposals show, that the gradual transference of the working population to urban districts must form the basis of reorganisation.

Chapter III deals with the municipal boundary, and Chapter IV describes the natural zoning. There are traffic diagrams and accessibility maps, and plans showing the density of the population, which rises from 10,000 in 1725 to 520,000 at the present day.

The remainder of the historical section deals with existing housing conditions and suggestions for periods of reconstruction. Health conditions, open spaces and parkways are described. There is a plea for the extension of the Survey, which, exact as it is, is nevertheless one of those things

> "Which always must be carry'd on
> And still be doing, never done."

Part II of the monograph is the most illuminating of this excellent work. The main theory is the founding of zones or districts of different occupational character. "The problem, therefore, is not here to find out what to zone for, but how to arrange the separate parts of the city so that they form one satisfactory mechanism, each part performing its functions in the best way." The scheme has been followed up in the suggestions for development by studying the balance that should exist between the industrial and commercial interests of Sheffield and at the same time endeavouring to secure the best residential amenities for the people. As previously mentioned, the proximity of the heart of Sheffield to the surrounding country can be made subservient to the readjustment of housing values; but the transference of residential quarters to the outskirts of the city can only take place gradually. There is also the allocation of definite factory areas, where new works are projected, to be taken into consideration. In the plan for improving the roads, the scheme has been influenced by local conditions; thus all the roads shown on Map No. 2 have a distinct value. The improvements suggested at the heart of the city are few, but they touch upon the essentials of the case. Only one central improvement of magnitude is suggested, the proposal being the replanning of the central station on a high level; for the city requires such a terminal, and in this differs from places like London and Paris, both of which have a ring of terminals.

The monograph on Sheffield contains theories applicable to almost every town in the country, for it shows the absurdity of dealing with towns piecemeal, without regard to a comprehensive scheme. The enterprise of the municipal authorities will have one good result if it is productive of inquiry on the part of the authorities of other cities in the direction of town development and control. The monograph is produced with taste; the diagrams and maps, while highly technical, are easy to read, and summarise the expert knowledge of the director, as well as the industry and skill of those who collectively have contributed to the success of the work.

* A Civic Survey and Suggestions Towards a Development Plan. Report by Professor Patrick Abercrombie on the scheme prepared for the Development Committee in collaboration with R. H. Mattocks. (The University Press of Liverpool, Ltd.: Hodder & Stoughton, Ltd., London.) 1924. 20s. cloth; 15s. paper.

REIMS CATHEDRAL

SIR BANISTER FLETCHER, F.R.I.B.A., in a recent lecture, at the Central School of Arts and Crafts, showed that all the principles of Gothic architecture, at the period of its greatest perfection, were exemplified in the construction and decoration of Reims Cathedral, to which he solely devoted this lecture.

Great among the many great cathedrals which cover France, and third among them in actual size, the cathedral overlooked the town which took its name from the Remi who submitted to the Roman legions. The first church was probably of timber; the second church on the site was destroyed at the beginning of the thirteenth century, just when the time was ripe for building a cathedral in the free Gothic style which was so well suited to French freedom in ideas. Archbishop, architect, masons and citizens set to work to rebuild their old cathedral, which had already attained such a proud position as the coronation church of France; and the church they erected proved to be the greatest tirumph of Gothic art in France.

Piccadilly, New Premises.

We understand that Messrs. Higgs & Hill have secured the contract for the new building work at the premises of Messrs. Swan & Edgar, and that Sir Reginald Blomfield will be the architect.

GOOD AND BAD MANNERS IN ARCHITECTURE*

By PROFESSOR C. H. REILLY.

While we are all discussing Modernism and wondering how we can express our valuable selves in our new buildings without resorting to the cast-off garments which used so conveniently (as it is now said) to cover up the emptiness of our invention, Mr. Trystan Edwards comes along with a new working hypothesis which we can all accept. It may not be the ultimate revelation, but it seems to me very good as far as it goes, especially for those of us who build in cities. It is one of those very obvious things which, once it has been pointed out, makes us wonder that we have not all had it before our eyes from the very start. It is simply this, that, whether we are modernist or traditionalist, the town as a whole is more important than any of our single buildings. Our towns are indeed the most self-revealing products of our civilisation, because in spite of all the new town-planning Acts we still make our towns to a very large extent unconsciously. Each ant adds a little piece to the pile without realising the ultimate shape of the whole, or, indeed, what the vast majority of his neighbours are doing. The ant-heap conception of the town might be all very well for the nineteenth century, with its ideas of unlimited individualism and competition, but it would not have done for the aristocratic eighteenth century, and it certainly will not do for the democratic twentieth. Our modern towns, spoilt as they have been by our immediate predecessors, not to mention our own shortcomings, are nevertheless the property of us all, and we as architects are their chief guardians. Mr. Edwards' book is a direct call to us to understand our responsibilities in this respect. It is a call expressed with a great deal of quiet humour and incisive wit, which makes the lesson he has to teach very good reading, however unpalatable to our pride on quiet reflection. Unless we have some reasoned conception of the town as an entity and of the relative social values of its component buildings, we are not likely to design those buildings so that they form parts of a consistent whole. The resulting whole will not express our ideals, however truthfully it may mirror our achievements. Some things will be too blatant and vulgar, some too small and insignificant. If we have no settled conviction as to the basis of good architecture, at least let us cultivate good manners and build with a reasonable urbanity and consideration of our neighbours.

Good manners are of two kinds. The less valuable are the manners which are the result of habit. They can be taught by rule and precept. Perhaps the eighteenth century, with its good architectural manners, relied too much on rules dictated from above. That was infinitely better, of course, than the period of simple barbarism which followed. The better sort of good manners, however, are those that come from an inner harmony of spirit. Such are the manners most needed to-day, and only by acquiring them can democracy really flourish. Very few of us seem to realise this in our buildings. Acting for our immediate clients, we are apt to forget our responsibility to the whole community. Architects should feel themselves to be a priesthood standing between God and the people. It is their business to translate into material forms only such aspirations of their clients as are worthy. If a client demands a building which, from its size and shape, will destroy a whole neighbourhood, and if he cannot convince his client of his folly, he should resign the work.

The detailed working out of this theory of the placing of the rights of the community before those of the individual will be found in Mr. Edwards' book, with many amusing and striking illustrations. He analyses architectural features for their social import. He restores the Orders to their right function as developed historically from temple, palace and forum. He carries his researches into the suburbs and exposes the rudeness of the unsociable gable, and towards the end of his illuminating treatise pillories a good many of the unfortunate Ruskinian doctrines of last century, such as the Seven Lamps of Vulgarity. Obviously Mr. Edwards is maintaining his reputation as a vigorous and courageous writer. In these days, when everyone is looking round for some solid ground on which to build, it is a great advantage to us all to have an architect with a trained philosophical mind exploring the subsoil for us. It is one of the things we are most proud of at Liverpool that after his career at Oxford Mr. Edwards went through the Liverpool course and afterwards worked with Professor Abercrombie at Civic Design. Civic Design in its broadest sense might be said to be the keynote of his teaching.

* "Good and Bad Manners in Architecture." By A. Trystan Edwards. (Philip Allen & Co.) Price 6s.

TOWN-PLANNING

In his ninth Town-Planning lecture at Birmingham University, Mr. William Haywood, F.R.I.B.A., said the Town Planning Act of 1909 marked an important date in town development. Government approval was then secured for a policy of progress, subject to a preconceived plan, and embodying certain new principles of house design and site arrangement, the excellence of which had been advocated and tested by reformers during the preceding twenty years.

Prior to 1909 town-planning conditions in all countries were represented by the development of characteristic local tendencies, and had not the comprehensive form that they had to-day. Since 1909 these tendencies had matured, and had been augmented by the interchange of international experiences making for progress on broader lines. For example, the feeling for corporate expression which was so marked a feature of Continental life, and out of which arose the very conception of town planning, had been supplemented abroad by the adoption of the best fruits of English individualism. The individual home, the limitation of houses to the acre, and the economic design of exclusively residential roads, were now universally accepted, as preferable in most cases to tenement buildings and roads for all purposes. In a similar manner, American schemes for municipal recreation, and her experiences with zoning, were valuable aids to wider views elsewhere. Town planning, in the modern sense of the word, was of comparatively recent growth, yet actual work upon town problems already showed that in some respects it was closely related to wider regional needs, as these in their turn were related to the still greater problem of national organisation.

In one respect the Town-Planning Act of 1909 was deficient. Although largely inspired by a desire for greater amenity, the promoters of the Act failed to provide any adequate method for giving legal assistance to this end. Public opinion, however, was moving towards an appreciation of beauty in future work, and in this new interest they should find scope for giving to their towns an uplift in outward expression which so many of them lacked.

ARCHITECTS' BENEVOLENT SOCIETY

Architects who have not yet insured through the Architects' Benevolent Society will, it is hoped, do so at an early date, either by effecting new policies, or, in the case of policies already placed, by transferring them to the agency of the Benevolent Society. The Society is in touch with most of the leading insurance companies, and is in a position, with the help of an advisory committee of insurance experts, to offer advice on all insurance matters, the interest of the insured receiving special consideration in every instance. In life assurance, the Society allows a rebate of half of the initial commission. The other half of the commission, as is the whole of the commission on policies other than life, is retained by the Society and credited to the fund in the published list of donors and subscribers as a contribution from the architect who has insured.

Since the insurance scheme first started, the sum of £100,000 has passed through the agency of the Society, which has received in commission close on £300. In addition, nearly £200 has been returned in rebate.

These figures, though encouraging, are not, it is considered, proportionate to the number of architects now practising in this country. The Architects' Benevolent Society urgently needs money; and while appreciating the extent to which architects in the ordinary way support it with subscriptions and donations, the Society does, at the same time, appeal to them for their support in the effort it is now making through its insurance scheme to help itself. A £1,000 life assurance brings in £10 (half of which is returned as rebate) the first year, and £1 15s. 2d. in subsequent years; a motor car policy for £500 brings in two guineas; and a £1,000 fire policy effected through the agency of the Society brings in the small amount of 2s. 7d.; so that, obviously, before any real benefit is felt to the Fund, it will be necessary for a very large number of people to give their insurances.

Particulars of any kind of policy will be sent by return of post on application to the Secretary of the Benevolent Society, 9, Conduit-street, W.

EXHIBITION NOTES

Amongst the current exhibitions there are two or three of a decorative kind which will appeal to our readers. At the Beaux Arts Gallery, in Bruton-place, is a fine collection of modern pottery by Mr. Reginald Wells, which shows with what admirable feeling he has grasped the essential qualities of Chinese pottery. The colour, form and glaze are all indicative of the sympathetic study the artist has bestowed on Chinese art, and though there is little or no divergence from the oriental type we feel that the designs are not the result of mere copyism, but show a keen sense of the possibilities which are open to those who can sympathetically follow old traditions. Many of these pots have a delightful simplicity and breadth with a refinement of form and colour which give them in many instances a fine decorative value; in both delicate tones of colour as well as in quite rich examples the effect is nearly always pleasing and refined. As Mr. Wells is gifted with a real sculptural instinct the modelled animals and figures will appeal to those who desire something better than a merely clever naturalistic treatment. Some of his little horses and cattle have quite an architectural value.

There is also a good collection of distinctive pottery shown in the Greves Gallery, so that we may gather from these and other recent exhibitions that we are witnessing a renaissance of design in the best kind of pottery. The principal feature of the Greves Gallery is a varied collection of Mr. A. J. Rowley's brilliant wood inlay. There is a wide field open to beautiful work of this kind, not so much, we think, in wonderful renderings of pictorial subjects as in real decorative work as applied to furniture and buildings. Attractive and clever as is much of Mr. Rowley's work, it is only right to point out that much of the work still leaves something to be desired in the matter of form outlines; the tree shapes are often lacking in a really satisfactory suggestion of tree growth, whilst sometimes the wood grain is rather a disturbing element instead of a help. Mr. Brangwyn's panels have a strong decorative value, but for real achievement in tone and colour it would not be easy to surpass Mr. Rowley's own work in "Westmorland" (52), which anyone might be glad to possess. In such things as "The Sower" and "St. Christopher," by Mr. A. Chase, we find a keen sense of the value to be obtained by these wood inlays.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript.—ED.

Aberdeen Granite.

[REPLY TO "ENGLISHMAN," NOVEMBER 28.]

SIR,—The following are the chief varieties of Aberdeen and Peterhead granites:—Rubislaw—Dark greyish blue in colour, and with fine grain. This variety is much in demand for monumental work, and is, I believe, used in the balustrade of Waterloo bridge. Dancing Cairns—Light bluish grey in colour to a darker grey. This is, I believe, the granite used on the Thames Embankment, and is also used as granite setts. Kemnay—Light grey with dark particles of mica.

"ANOTHER ENGLISHMAN."

SIR,—*Re* Scotch granites, the following particulars may be of use:—County of Aberdeenshire—Red granites quarried in Peterhead, Huntley, Cruden, Buxburn, Aberdeen. Grey granites quarried in Buxburn, Newhills, Kintore, Cluny. The true granites from Aberdeen and Peterhead are especially noted for their durability and beauty.

"F. C. D."

Stone Flags.

[REPLY TO "GARDENER," NOVEMBER 28.]

SIR,—Stone paving should be laid on a good bed of sand well levelled and packed up to conform with the different thicknesses of the flags, the corners of which should only be bedded up in lime mortar, and the joints made in the mortar, and finally grouted up. This method is much less likely to result in cracked flags, as the sand will accommodate itself to the underside irregularities and provide continuous support without subsequent shrinkage which may occur where the stones are bedded on a continuous bed of mortar.

"PAVIOUR."

Thatching.

[REPLY TO DEVON, NOVEMBER 28.]

SIR,—I noticed in the letter on "Thatching," signed by "Devon," that the water from a thatched roof is not worth retaining. Does this mean that the quality of the water is not satisfactory, or that the amount is very small on account of it soaking into the thatch? I am having a roof thatched with Norfolk reeds, and should be glad to know whether "Devon's" remarks apply to this kind of thatching. The eaves in this job will project 24 in.

F. C. P.

A Damp Party-wall.

[REPLY TO "BUILDER," NOVEMBER 28.]

SIR,—It is unfortunate the points of the compass are not given; also the thickness of the party-wall between C and B. According to the sketch plan, there are two dimensions given for the same width, but they do not agree by 4 in. Let us call them the north and south dimensions. The north dimension reads 24 ft. 7 in.; the south, 24 ft. 3 in.; thus the north dimension is 4 in. longer than the south, although they are both figured to the centre of the party-wall. The thickness of the party-wall not being given, it is rather difficult to get an idea of the situation. The flank wall to the basement addition may not be the same thickness as the party-wall between B and C. If this is the case there may be a set-back of 4½ in. to the said flank wall, and the R.W. pipe in question would be on C's ground, and he would be the owner of the pipe, and would have to make good all damage done to his wall. In any case, C would be entitled to fix his R.W. pipe on his wall, to the extent of his boundary, which would be the outside edge of the footings, although they are not seen.

There appears to be an easement for rainwater from the roof of B's house to the R.W. pipes on the flank walls of A and C's houses.

If the dimensions are correct, someone has erred in setting back the iron fence 2 ft. or more on C's ground; but as the new owner of B's house bought it as it stands, this is a matter of settlement.

A. SOUTH.

Thickness of Lead.

[REPLY TO "YOUNG ARCHITECT," DECEMBER 5.]

SIR,—The thicknesses of the weights desired are .069, .085 and .102 in., respectively. To measure, cut a portion of, say, the 4 lbs. weight 6 in. square. If it is "according to Cocker," its weight will be 1 lb.

JOHN M. FIFE.

SIR,—Four lbs. lead is .068 in. thick; 5 lbs. .085, and 6 lbs. .101. The best and handiest method of measuring is by means of a lead gauge, obtainable from any firm of instrument makers. This gauge takes the form of a brass or gun-metal plate cut with V incisions, the inner edges of which are graduated in lbs. The sheet is inserted into the V, which tells the weight per ft. super.

"FATHER."

Wall Paper.

[REPLY TO "AMATEUR," DECEMBER 5.]

SIR,—The first dimensions are those of British-made goods. The second, 9 (not 8) yds. long and 18 in. wide, are of French manufacture.

JOHN M. FIFE.

SIR,—The paper supplied to Amateur was probably of American manufacture, as 8 yds. by 18 in. is the standard American size. The size which your correspondent anticipated is the standard English size, though there are some English firms who now, I believe, make their papers only 18 in. wide.

"ENGLISHMAN."

"Hot Plates."

[REPLY TO "BAFFLED," DECEMBER 5.]

SIR,—Most makers of gas cookers sell a hot closet in conjunction with a hood, that collects and disposes of the hot air from the oven and gas rings, by way of a flue pipe. This arrangement has generally proved satisfactory. Any good firm of makers of which names will be found in the advertisement columns of *The Builder*, would be glad to give full particulars.

"DISINTERESTED."

Decay in Stone.

[REPLY TO "CONSTANT READER," DECEMBER 5.]

SIR,—Brush down and apply two coats petrifying liquid, allowing a few days to elapse between each application to admit of the first coat's penetration.

JOHN M. FIFE.

SIR,—Your correspondent will find most of the information he requires if he applies to the Department of Scientific and Industrial Research 16, Old Queen-street, Westminster, which department places the results of the useful research work carried out under its auspices at the disposal of architects and others interested.

"LONDONER."

Hollow Walls.

[REPLY TO L. C. M., DECEMBER 5.]

SIR,—I am very glad to read your correspondent's letter calling attention to the lack of soundness in the construction of cavity walls in the generally accepted methods. There is no doubt that the life of such work is strictly limited, and that there should be a good market for earthenware ties manufactured in such bulk as to make their use a commercial proposition. It only needs the courage of repeated and insistent demand for such goods to ensure the supply, and we should then have the satisfaction of knowing that we are building to last. The price need not be compared to tie for tie with the galvanised variety, as every earthenware tie would save one brick, the saving of which must be reckoned.

"SOUND BUILDING."

Cheap Roof Trusses.

SIR,—I should be glad if any of your correspondents could advise me of an economical and sound timber roof truss suitable for a building 20 ft. span with a battened and slated roof of 30 deg. pitch. The old forms of King post trusses seem very wasteful of material, and unnecessarily strong for the purpose, while their form does not seem to allow of the sizes being materially reduced if their own weight is to be carried.

PROGRESS.

Cement Flashings.

SIR,—Now that sound waterproofing materials to be used in conjunction with cement are on the market, can you advise me as to whether the use of cement so treated for flashings can be considered as a sound method of construction? In an age when economy is of such vital concern to building, such matters, I think, merit consideration.

"SAXPENCE."

Made Ground.

[REPLY TO "PRACTICE," DECEMBER 5.]

SIR,—I quite agree with all that is stated by "Practice" in his reply of December 5, to my letter of November 14, especially as regards the weight of the superincumbent building being first obtained, and then the bearing capacity of the soil to be built upon. If this is not good, precautions must be taken to distribute the load by concrete foundations, rafts, or piling, as the case may be. I did not deal with this important part of the subject in my short letter.

A. SOUTH.

Speculative Building.

SIR,—I shall be glad if some of your readers will kindly state the price per foot cube they are able to erect terrace-type houses of three bedrooms, 18 ft. frontage.

Owing to the fluctuation in wages and materials, it is difficult to obtain accurate data.

"BUILDER."

Building By-laws.

[REPLY TO "A.G.L.," DECEMBER 5.]

SIR,—A structure may be a new building under the Public Health Act, 1875, and, at the same time, a temporary building under the Public Health Act, 1907. See Andrews *v.* Wirrall R.D.C. (1916), 1 K.B. 863.

Section 27 of the Public Health Act, 1907, deals particularly with the erection of temporary buildings. This Act, however, only becomes operative in a district on the Order of the Ministry of Health; but it has become operative in very many urban districts and some rural districts.

In these cases, the question to be determined is, whether the structure can be a "building" or not; whether it is of a mere temporary character or not. A portable theatre, constructed of wood and erected for a short period only, was held not to be a "building" under the section above referred to. See Newell *v.* Ormskirk U.D.C. (1907), 71 J.P. 119.

So, too, in Whitehorn *v.* Smelt (1910), 74 J.P. 102, a "houp-la" with a canvas roof, and closed in on three sides with canvas, was held not to be a "building." And in general it was said in Southend-on-Sea Corporation *v.* Archer (1901), 70 L.J., K.B. 328, that structures erected

for temporary purposes, not having the character of buildings used or intended to be used for purposes of human habitation, are not "new buildings." But the fact that structures are not intended for human habitation does not of itself take them out of the category of new buildings; for, in South Shields Corporation *v.* Wilson (1901), 65 J.P. 294, a wooden shed intended for use as a stable only, was held to be "new building" within a by-law.

In Stevens *v.* Gourley (1859), 7 C.B. (N.S.) 99, a structure of wood intended as a shop, and laid on timber, and not let into the ground, was held to be a "building"; and, again, in Richardson *v.* Brown (1885), 49 J.P. 661, a wooden building, 30 ft. × 13 ft., *on wheels*, used as a butcher's shop, and having a supply of gas, spouts, and a fall pipe, was also held to be a building.

On a consideration of the above, it would appear that the structure described by "A.G.L." is a "temporary building," and subject to the by-laws of the locality. The fact that it can be taken down and erected elsewhere, and on wheels, does not affect his position. It may be added that, in recent years, many concessions have been made by local authorities in respect to temporary and wooden structures. "A.G.L." should ascertain what these are from the local authority concerned, for they may assist him in his difficulty. "L. J. C."

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

THE King opened Parliament in person, on Tuesday, December 9. The gracious speech from the Throne contained a number of references to housing, as is shown by the following extracts:

"My Ministers are deeply impressed by the continued shortage of housing accommodation. They are convinced that the encouragement of the private builder and the occupying owner is an essential element in the successful treatment of the problem, and substantial progress has been made in this direction. My Ministers will devote their attention to overcoming the rising cost of houses and the shortage in the available supplies of skilled labour. With this object, they will endeavour to supplement the building resources of the country by encouraging new methods of construction calculated to promote the rapid production of houses of approved design and moderate cost, and, at the same time, to assist in the reduction of unemployment.

"The housing problem is not merely one of overcrowding, but also of the existence of large numbers of houses which fall below modern standards of propriety and sanitation. Something is already being done under existing legislation to clear the worst areas and to remedy sanitary and structural defects in those which remain. As new building increases, it will be possible largely to develop this process, and my Government will take every opportunity of pressing it forward with vigour."

His Majesty added that measures would be presented for the consolidation of the Law of Property and of the enactments relating to the procedure of the Supreme Court, for the reform of the system of rating and valuation in England and Wales, and of rating in Scotland, and for the prolongation of the Rent Restrictions Act.

Mr. R. G. Ellis, the mover of the motion for the presentation of an address of thanks, in reply to the Speech, said that housing, so far, had been very much the sport of politics. The slow progress had been the subject of two schools of criticism, that which alleged that there had been profiteering in materials, and the other contending that "ca' canny" and restriction of output had raised the cost. If any private interest, springing either from the owners and producers of materials or from trade unionists, determined to hold up things for their own ends, or continued to obstruct in the way that had been suggested, the House would demand and the Government would be obliged to grant some form of legislation putting an end to that sort of exploitation.

THE AUCTIONEERS' INSTITUTE

MR. E. H. BLAKE, C.B.E. (Secretary) recently read a paper before the Auctioneers' and Estate Agents' Institute on "The Institute, 1886–1924." In the course of his remarks he said for the first three or four years of its existence the Institute had its home at No. 50, Moorgate-street, as it then was. In 1890 larger premises were taken at Nos. 57 and 58, Chancery-lane, and these served their purpose for nearly 16 years, although by 1898 there was a demand for increased accommodation. Suitable premises were looked for in all directions, but it was not until the end of 1905 that it was decided to acquire a lease of No. 34, Russell-square. Extensive structural alterations were made, and the Institute entered into occupation in the spring of 1906, remaining there for about 18½ years. There was no doubt that the members of the Council of 1905 thought those premises would serve the purposes of the Institute for a generation or two; its growth had evidently exceeded their most sanguine expectations. At the Birmingham Provincial Meeting in September, 1921, Mr. Chas. Osenton submitted the proposition that the Institute had reached a stage in its development when larger and more commodious premises had become an absolute necessity for the proper carrying on of its work.

Only three short years ago—but a good example of the promptitude with which their Council acted. Who, hearing Mr. Osenton's proposal at Birmingham in the autumn of 1921, would have thought that by the autumn of 1924 the Council would have found this fine freehold site, obtained possession from the numerous tenants, demolished the old buildings, erected and equipped the new building, and have been in the position of holding this, the first of their winter meetings of 1924–5 in the new premises?

The first effort of auctioneers to combine for their mutual benefit would appear to be indicated by a memorandum which was drawn up at the Piazza Coffee House in 1799. That memorandum resulted, he understood, in the formation of the Society of Auctioneers, a Society which was still in existence. The membership of the Society was limited, and its functions were, he believed, restricted to those of a dining club, at the dinners of which matters of professional interest were discussed. It was in 1886, eighty-seven years later, that a Mr. Ottley circularised the members of the profession in regard to the formation of an Institute of Auctioneers. A meeting was held at the Cannon-street Hotel, 120 members of the profession being present. It was decided to proceed. The first annual meeting was held on March 23, 1887, when it was resolved to take steps to secure incorporation under the Companies Acts. Matters moved slowly in those days, and although this Institute of Auctioneers and Surveyors of the United Kingdom published its first prospectus in the Press in April, 1887, it was not until two years later that really active steps were taken towards incorporation. On June 26, 1889, however, the organisation was duly incorporated as "The Auctioneers' Institute of the United Kingdom," and it continued its progress under that name until March 6, 1912, when, on the Estate Agents' Institute being amalgamated with it, it became the Auctioneers' and Estate Agents' Institute of the United Kingdom.

Northampton Polytechnic Institute.

On December 5, the annual prize distribution of the Northampton Polytechnic Institute took place at St. John-street, E.C. Mr. L. B. Sebastian (Chairman of the Governing Body), presided. The Marchioness of Northampton distributed the prizes, and an address was given by the Marquess of Northampton, D.S.O.

Among the degrees and certificates awarded by the University of London to students attending the day and evening courses in engineering, no less than twenty-nine students obtained the degree of B.Sc. (Eng.), of whom three obtained first class honours and seven second-class honours.

THE SURVEYORS' INSTITUTION

MR. E. P. WELLER recently read a paper on "Agricultural Costing: An Aid to Farm Management," at the Surveyors' Institution. In the course of his remarks he said the equipment of a farm might be divided into two groups, (*a*) those things which were usually owned by the landlord (buildings, fences, hedges, ditches, drains, roads, &c.), and (*b*) those which were usually the property of the tenant (working horses, milking and breeding stock, machinery, implements, tools, utensils, &c.).

With regard to the landlord's equipment, the problem in the case of a tenant-farmer involved comparison of the value of the equipment for production and the rent asked for it, plus the tenant's share of the cost of maintenance and incidental expenses such as rates and taxes. It had been said that buildings were unproductive, but adequate and well-designed buildings might so assist economical working of the farm, particularly in regard to labour costs, that they materially improved the financial results. The farm so equipped was therefore worth an extra rent as compared with one which was not so well provided. Similar considerations applied to other kinds of equipment. Some might have the effect of directly reducing outlay, while others might enable a given outlay to produce larger returns. At the same time, the mere presence upon the land of buildings or other equipment, even if of up-to-date design and costly construction, was no reason at all why the tenant should agree to pay rent for them. He had to consider value for production and not appearance or cost.

In the case of an owner-occupier similar considerations applied but sinking fund and interest on purchase money or on cost of construction must be substituted for rent, and the full cost of maintenance, rates and taxes must be added. It might also be necessary to take into account the value of the farm and equipment to the owner for production compared with the price it would realise if sold, due regard being had to alternative investments for the capital.

The question of the tenant's equipment was bound up with the system and methods of production adopted and the labour organisation of the farm. With regard to live equipment, the farmer had to decide what classes of stock he would keep and in what proportion. He must further consider the relative advantages and disadvantages for specific purposes of different breeds and of pedigree stock *versus* ordinary commercial stock. The considerations affecting dead stock were similar to those applying to buildings, &c., purchased or constructed by the farmer. He must estimate the economy in working which they would effect, or the improved results they would give, *i.e.*, their value for production compared with interest upon the outlay involved, plus sinking fund and upkeep.

A wrong decision upon any of these points caused waste. Costing was of the utmost value in assisting correct decision.

An Architects' and Builders' Diary.

The 1925 edition of *The Builder* Diary, which has been so well received and appreciated in former years, is now available (London: 4, Catherine-street, Aldwych, W.C.2, price 2s. 6d. net). As in previous years, the first part contains a great deal of valuable information of everyday use to those engaged in the architectural and surveying professions and the building industry. Full notes are given on all the building trades, and there are mensuration notes, notes on buildings and fire insurance, full particulars of the organisations in the professions and trade, a list of scholarships and prizes in the professions, postal information, &c. Pages are reserved for memoranda, followed by calendars for 1924, 1925 and 1926. The remainder of the book is occupied with a diary for 1925 (one opening to a week), and space for a cash account. Altogether there are about 180 pp. in the book, which is printed on thin paper so that it is only three-eighths of an inch thick; the book measures 6 in. by 4 in., a convenient size for the pocket.

THE BUILDING TRADE

THE TRADES' TRAINING SCHOOLS

THE annual prize-giving of the Trades' Training Schools, conducted by the following City Guilds—The Armourers and Brasiers, Carpenters, Glaziers, Joiners, Paint-Stainers, Pewterers, Plaisterers, Tylers and Bricklayers and Wheelwrights, Great Titchfield-street, was held at Carpenters' Hall on December 5, presided over by Mr. James Harris Browne, Master of the Carpenters' Company.

Mr. Frederick Sutton, J.P., chairman of the Schools Committee, read the annual report and stated that the attendances during the session reached 12,612, giving an average of 84.64. At the Building Exhibition at Olympia all the Building Craft Schools took part, and were very successful in the competitions.

Sir Banister Fletcher, F.R.I.B.A., Director of the Schools, gave the thirty-first report of the work carried on during the session, 1923-4, and said the session's work was adjudicated on May 8 by the judges, who found it well up to the usual standard and occasionally above it. The judges were: Messrs. Frederick Sutton, J.P. (Past Master of the Carpenters' Company, and Chairman of the Schools), G. C. Barnes (of the Joiners' Company), J. Harris Browne (Master of the Carpenters' Company), E. Guy Dawber, Vice-President, R.I.B.A., W. J. Englefield (of the Pewterers' Company), W. R. Evans (then Master of the Carpenters' Company), Sir George Frampton, R.A., J. A. Gotch, P.R.I.B.A., F. T. W Goldsmith, F.R.I.B.A. (Past Master of the Plaisterers' Company), W. Stewart Greene (of the Painters' Company), W. Grellier, F.R.I.B.A. (Past Master of the Tylers' and Bricklayers' Company), Sir W. Goscombe John, R.A., Bertrand Johnson (of the Pewterers' Company), E. Snow Lancaster (of the Joiners' Company), Ellis Marsland (of the Tylers' and Bricklayers' Company), W. J. Minn (Past Master of the Carpenters' Company), George Parlby, W. T. Plume (Editor of *The Builder*), Percy Preston (Past Master of the Carpenters' Company), E. S. Rider (of the Joiners' Company), Frank W. Robson (Past Master of the Wheelwrights' Company), S. G. Castle Russell, M.I.E.E., H. D. Searles-Wood, F.R.I.B.A., H. P. Shepherd (of the Wheelwrights' Company), Sir Brumwell Thomas, F.R.I.B.A., A. R. Upjohn (of the Glaziers' Company), and Mr. J. Hutton Freeman, Clerk to the Carpenters' Company.

The following trades and crafts met during the session, under the tuition of the undernoted:—The Carpenters, under Mr. Henry S. Playstead, assisted by Mr. Archbold; the Joiners, under Mr. Charles E. Dunkin and his deputy, Mr. Smart, assisted by Mr. Howe; the Masons, under Mr. H. G. Bush; the Glaziers, under Mr. J. Dudley Forsyth, assisted by Mr. Dankes; the Painters, under Mr. H. J. Fowler; the Plaisterers, under Mr. W. H. Pearson; the Plumbers, under Mr. Gooding, assisted by Mr. Pardoe; the Metal Workers' Class, under Messrs. H. Collins and R. N. Coldwell; the Stone Carvers, under Mr. Oakley; the Life Modelling Class, under Mr. Charles L. Hartwell; the Tylers' and Bricklayers' Class, under Mr. F. W. Billinghurst; the Wheelwrights, under Mr. R. C. Peirce; the Wood Carvers, under Mr. F. A. Markham; the Electricians, under Mr. S. Nicholas, assisted by Messrs. Kemp and Hollis.

A course of demonstrations in various crafts was again given by their instructors to students of architecture from University College, to impart that practical knowledge of handicrafts which is so important to the architect in practice.

Sir Banister said the students' enthusiasm was not in the least abated, and a steady stream of apprentices and improvers poured nightly into their school in Central London from the most diverse quarters. All the widely scattered districts contributed their quota to the training ground in the crafts of building, which were in their entirety such essentially national industries. He would like to emphasise their peculiarly national character, for without any artificial or legislative interference, the building trade was, of its very nature, a protected industry, free from foreign competition, because it had to be carried out where it was actually required for use. This might not apply with equal truth to each individual contributory branch of the work, which went to the making of a building, especially in these days of modern methods. In England, in the variety of products required, they were face to face with the threatening danger to British building which their schools set themselves to combat by producing good craftsmen.

They could not import—at any rate at present—whole new buildings from overseas; they must be erected here. They could import raw materials, and their aim should be so to equip their own workmen that they could turn this raw material to the best possible use. This was the object of their schools—to equip their own men so that they could turn out the best work to the best advantage in all the interdependent crafts. They were all familiar with the saying that "Necessity is the mother of invention." They did not sufficiently realise, however, that if, from any cause, at any time, there was a shortage of any one particular material necessary for building, then that was the opportunity for the inventor to step in and supply a "substitute." Had not the war taught them that there was a substitute for everything except a good workman. It was their business in these schools to produce the good workmen, ready and willing to do the work required of them. From a variety of causes, there was now not only a shortage of bricks but also of bricklayers for building the houses for which the people were clamouring. Side by side with this there were, they were told, millions of bricks which only had to be shipped over from Belgium or even from Germany. They had often heard that you could not make bricks without straw, but there was now no difficulty in making houses without bricks, so there was a rush to supply all sorts of substitutes, and soon they might have the "all-steel house" of Lord Weir. This sort of production was something hitherto outside the building crafts, and was one of the results of the new desire for that mass-production which was both cheap and quick, and which was so largely independent of individual effort. It was to train the individual workmen that their schools existed; first of all to awaken and strengthen his capacity to learn, and then to develop his capability to work. They were not concerned with the political aspect of their industries, nor with trade union activities; but they were deeply concerned to develop the individual, both as to his outlook and to his work, so that he should be not only willing but able to give of his best for the best pay he could get. It had lately been said by a labour leader that "there are no employers who fail to understand that they had no right to demand the best from an employee, unless they were prepared to give the best in their turn." That was a warning which all engaged in any craft would do well to lay to heart. This was the spirit which they sought to engender in their schools. They sought to spread the propaganda of efficiency, and to cultivate a living loyalty to old British traditions of superiority in workmanship, so that British craftsmanship, by its reputation for thoroughness, might continue to challenge the world. In conclusion, there was no real pleasure quite like that which arose from unstinted expenditure of energy in a helpful environment and the application of one's powers to some objective worthy of them. Let them hope, therefore, that a life of active service, and of the enjoyment resulting from it, laid before every one of their students, so that in the days to come, each student might feel that he owed much to those who guided his mind and his hand in the training of his early days at the Trades' Training Schools.

Sir Kynaston Studd, O.B.E., then distributed the prizes, and said he had great pleasure in being with them for various reasons. He had intense respect for all the City Companies were doing in maintaining educational institutions, and he was particularly attracted to their school because it had for its object the training of those trades round which the Companies who maintained the schools were founded. He had also had a certain amount of experience of the value of technical schools at Titchfield-street where he was their nearest neighbour. There had been remarkable successes attained almost entirely due to training received in spare time. There was nothing more encouraging than to visit such an institution and see the type of man who, after a day's work, found time to equip himself so as to enable him to do something worthy both of himself and his country. They had had splendid successes in carpentering, metal work, and bricklaying, and had the advantage of studying with other young men of similar age and intelligence. Last week he had revisited their school, and had been delighted to find that no special preparation had been made. Nearly all the things they were doing had been done in The Polytechnic (Regent-street) in days gone by; they were acquiring knowledge and would use it in the manner most remunerative. Useful work enabled them to help, not only themselves, but people outside. He was much impressed with Sir Banister Fletcher's remarks about the teachers. There were two things needed in a teacher apart from knowledge: faith and inspiration. This ideal their teachers had attained. He would impress upon them that skill and intelligence in their own trades represented their capital. The more skill the greater the capital, and the greater the returns from that capital. There was much unemployment, and, he was afraid, many unemployables. They had had no education to enable them to command a living wage. If the students learnt their trade thoroughly they would never need to have any anxiety as to where to obtain work in order to enable them to obtain a living wage. He appealed to them not to be satisfied with merely learning a trade and studying things belonging to that trade, but to go in for general culture, including, particularly, constitutional history. Also to cultivate a taste for good books. On the other hand, they must not forget the athletic side. They must also study human nature: to be skilled craftsmen alone was not enough. Let them consider their present relationship with their masters. Did they consider him a decent fellow or a "washout"? If they had a good master let them hang on and give him more than value for money. If they had the other kind it would be wise not to worry too much but to do their best to give him more than value for money: by example they might bring him to a more reasonable frame of mind. In conclusion, he would remind them that the main thing to remember in life was to have a sound mind, body and soul. They could do nothing better than to remember the words, "I am the captain of my soul; the master of my fate." He commended the sentence of one of their teachers as a motto, "Erect square and fix securely."

Cordial votes of thanks were passed to Sir Kynaston Studd, the Companies, the Chairman, and others.

CONCRETE AND CEMENT AS DECORATIVE MATERIALS

MR. T. P. BENNETT, F.R.I.B.A., lectured recently before the Institute of British Decorators on this subject. In the course of his remarks, the lecturer said: with the rapid development of steel as a constructional material and the parallel development of reinforced concrete, architects and designers were faced with the necessity of studying surface treatment which could be used for the design of buildings which arise directly out of the constructional materials employed, and particularly out of cement. The rapidity with which these constructional materials had developed was something which was new in building construction, and the constructional revolution which had taken place was perhaps as yet only imperfectly realised by those who were faced with the responsibility of using it.

For some thousands of years brickwork and masonry had been the principal materials employed in the erection of buildings, and in the last century, when steel and iron first became prominent, they were regarded merely as supporting materials and were faced with stone or brick, producing what one might call pseudo brick or masonry buildings. The objections to this system of facing one constructional material with another constructional material were rapidly becoming evident, and the most active brains in design could not help seeing that the day was not far distant when steel and concrete building must evolve its own method of expression. This was being rendered increasingly important because they were realising that the use of steel and concrete did not merely alter the external appearance of the building, but it altered the fundamental proportions upon which the design must be based. Design was, of course, much more a matter of proportion than of surface decoration, and it was therefore impossible to employ steel economically and cover it with a masonry skin with any real chance of a successful result.

In examining the history of the subject, they found that concrete was used externally by Roman and Byzantine buildings, and that they evolved methods of decoration of their own which might be made a basis to their study of the subject. In Roman work, concrete was not reinforced with metal, and the proportions of the parts of their buildings therefore approximated to the proportions of masonry structures. Furthermore, the social conditions of the Romans demanded the use of excessive areas of concrete in order that they might safeguard themselves against possible failures from the employment of unskilled slave labour. As a result, piers were of massive proportions, vaults were sufficiently thick to eliminate thrust, and other parts of the structures were adjusted to give considerable effect from deep reveals and projections. From these social conditions sprang also the principle of Roman decoration, that was to say the Romans were able to command an unlimited supply of men, the majority of whom had little or no skill, but they were able also to command a supply of other men of highly developed skill. Thus it would readily be seen that the most economical method of producing buildings was to build the carcase and case it with ornament. In the Roman baths, in the Roman palaces, in the great Fori, they got, therefore, mass concrete as a base and plaster mosaic or marble sheeting as a finish. It seemed logical to accept those broad systems of the Romans as possible sources of inspiration for their own buildings, because, although they had not experienced similar social conditions, the scarcity of skilled craftsmen and the steady increase in the number of unemployed unskilled men tended to bring about a set of conditions which were not dissimilar.

With regard to modern treatments, the lecturer said they came upon some of the essays which had been made on the Continent to use concrete with stucco or other finish for industrial and other buildings, and they were introduced for the first time to that vital revision of proportion which he had indicated at the outset as an essential part of design of the future. It was idle to express a mere arbitrary opinion as to their likes or dislikes for these preliminary essays in the logical expression of a new building material. This material he called new, because it was new in the form in which they were using it; that was to say, they did not command either the unlimited labour supplies or the unlimited money which was typical of the Roman and Byzantine use of concrete. They were, further, employing steel in a way hitherto unknown, which reduced the mass of their structures to relatively minute areas.

It was not surprising that the architects of the world had failed to find immediately a perfectly logical, sound, satisfactory, and interesting solution of this problem. Investigation into the history of construction showed that it was the first time for 2,500 years that the proportions of building had been fundamentally altered. He found, therefore, considerable fascination in the essays of M. Eric Mendelsohn, the German architect, who had endeavoured to produce buildings which arose completely from structural necessities and which were to be executed in concrete. The first of these was an optical factory; the next an aerodrome; while Bruno Tant's was another scheme for an office building and cinema. There was a certain atmosphere of amusement about these essays. To their unaccustomed eyes, they hardly looked like sane structures, possibly they were not sane structures, and possibly they would have a relatively small influence upon future developments, but they showed a real attempt to grapple with the proportion problem and to give reinforced concrete some new and logical expression.

With regard to the possible methods of surface treatment the lecturer said the first of these was the possibility of colouring grey Portland cement used in blocks or used as a fixing material. The first difficulty they had to face was a tendency of the acid in the cement to destroy the colour in the material, and the second the tendency of the colouring material to destroy the setting powers of the concrete. He had arrived at a rough distinction in colouring materials which he believed to hold good universally, but which he had not yet completely tested. This distinction indicated that pure metallic colours were perfectly safe, both as regards permanence of colour and the absence of deleterious effect to the setting of the concrete. Lakes which were mainly aniline dyes superimposed on colloidal clay retarded and might even completely destroy the setting powers of the concrete with, of course, disastrous results to the block or the stucco. Earth colours had a similar effect. At the moment he was using a purple oxide of iron in concrete blocks, which appeared to be producing a very interesting warm red purple.

Mr. R. R. Butler, chemist, of the Northern Polytechnic, had, said the lecturer, commenced to build up some definite information on this matter, and although his investigations were in their infancy he was able to give a few details. He had experimented with certain dyes in an effort to mix cheap water dyes with the water and so colour the whole of the cement at a more or less nominal cost. They were continuing these investigations so far as the possibility of mixing ground colour with concrete was concerned, and the following list indicated that safe colours were difficult to obtain and that the colour range was at present very restricted. They hoped to be able to add to this list in the near future: Safe colours—Red oxide of iron, purple oxide of iron, chrome yellow (lead chromate), vermillion. Unsafe colours—Derbyshire ochre, American ochre, Italian sienna, American sienna, Turkey umber, Devonshire umber. Umbers and siennas in general were unsafe because they contained clayey matter. Ultramarine contained clayey matter, and Prussian blue would turn brown because of the presence of lime; it would not stand up to alkalis. Brunswick green was Prussian blue mixed with chrome yellow, and was therefore unsafe and would lose its colour. Lakes were organic colouring matter, and were mixed with clayey matter; they were, therefore, unsafe.

The next point which was of interest was the employment of the white cement. White cement was valuable for two reasons: (1) It provided an extremely attractive surface in itself; (2) it could be made the basis for effective colouring contrasts. White cement had been employed in a number of buildings in America and was finding its way to England. Its first possibility was as a pointing material, its second as a stucco. Scrubbed surfaces with marble chipping or with stone produced some extremely interesting effects. He had enquired into the possibility of using scrubbed work upon original structural concrete, but had found that considerable difficulty was experienced in striking the forms and executing the scrubbed face at the exact period in the process of setting which left the concrete sufficiently hard for structural purposes, and was still sufficiently soft to enable it to be scrubbed. So definite was this difficulty that the attempt to execute scrubbed face on structural concrete had been abandoned, and it was usually employed upon a stucco surface subsequently added to the main structure. He had, however, succeeded in scrubbing the face of concrete blocks which were cast before being put into the building. Attempts had also been made to obtain these surface finishes by treating the concrete with muriatic acid, which attacked the cement and left the aggregate untouched. Such a method might have very great value if one could be certain that the action of the acid could be permanently arrested at the desired moment.

Everyone was familiar with the concrete buildings at Wembley; although these buildings might be of architectural merit the general effect was unattractive and heavy because of the almost complete absence of colour, this defect being emphasised by the indifferent texture of the material. This lack of attractiveness was particularly to be regretted because in some cases extremely interesting work had been done.

NEW BUILDINGS

Uxbridge.—It is proposed to extend the works of Messrs. King & Hutchings, Ltd., printers, in Vine-street, Uxbridge. A new building of one story, extensively lighted by roof lights and side windows, is to be erected on a site 40 ft. by 90 ft., to be used for bookbinding and warehousing. The architect is Mr. W. L. Eves, of 54, High-street, Uxbridge.

Liverpool.—The Ecclesiastical Commissioners have approved plans for the erection of a new church, dedicated to All Souls, at Springwood, Allerton, a new parish formed out of the joint parishes of Garston, Allerton and Grassendale, Liverpool. The new edifice will follow the Neo-Byzantine style, and will occupy a site in Mather-avenue, which runs through the Allerton Estate. Accommodation will be provided for 750 worshippers, when complete. All the walls and piers will be built in brickwork, faced both externally and internally with rustic bricks. Very little stonework will be employed. The floors to the nave and transepts will be laid with wood blocks on concrete. The chancel steps and floor will be of stone. The external roof will be of timber, covered with red pantiles, and will cover a barrel-vaulted interior of reinforced concrete. Work on the first portion of the building will be commenced as early as possible, and will provide accommodation for 500 persons. The architects are Messrs. Campbell & Honeyburne, of 51, North John-street, Liverpool. The quantity surveyors are Messrs. W. M. Law & Son, 51, North John-street, Liverpool.

Richmond, Surrey.—Alterations and additions to the old police station in George-street, in order to adapt it as a dairy and restaurant, for the Express Dairy Co., Ltd., 26, Tavistock-place, W.C.1. Architects, Messrs. Taperall & Haase, 3, Gower-street, W.1. Messrs. Grigg & Son, 78, Manchester-road, London, E.14.

HOUSING REPORT OF BOROUGH TREASURER, NEWPORT

THROUGH the courtesy of Mr. C. F. Ward, the Borough Architect of Newport, we have been forwarded a copy of a report on the Housing Acts of 1923 and 1924 by the Borough Treasurer and Controller, which we find an extremely interesting document, and we regret that our space will only permit us to give a very short notice of some of the points it contains. We gather that hitherto the Corporation, under the Chamberlain Act of 1923, has confined itself to assisting private enterprise by promoting the construction of houses (1) by making lump sum grants of £110 in the case of the parlour type house, and £90 in the case of non-parlour type houses, and (2) giving guarantees to building societies. In the first case the Government grant of £6 was treated as a capital sum of £75, leaving £35 and £15 respectively to be provided by the Corporation, but all the applications granted up to the date of the Report, November 21, 1924, were in respect of parlour houses.

One of the points which will be considered of main interest in this report is the comparison of schemes it contains with a view to determining, if the Corporation build, whether they should do so under the Act of 1923 with a Government grant of £6 for twenty years, or under the Act of 1924 with a Government grant of £9 for forty years: the rent in the first case being unrestricted, but in the latter restricted. It may be noticed here that the unrestricted rent is taken as 9s. 9d. against a restricted rent of 8s. 8½d. As we have been invited to make use of this report, we now reproduce the two tables in which this comparison is contained (see Tables I and II).

It is necessary now to quote from the Report the comments upon and explanations of these two Tables:—

"TABLE I.—From this it will be seen that during the first sixty years there will be a loss each year of a substantial character after the Government grant has been credited, but in the last twenty years there is a surplus owing to the loan periods being exhausted, for in order to obtain a true comparison with Table II, it has been assumed that loans will be raised for periods of twenty years to cover the cost of roads; thirty years for sewers; sixty for buildings; and eighty years for land.

"*What these losses mean.*—It is necessary for me to translate these losses and gains into something the mind will readily seize upon. I have, therefore, calculated that these losses should be charged with a certain percentage against them each year, and that the gains in the last twenty years shall be credited with earning a certain percentage. The result is this: that if the local authority were to place a sum of £7 3s. 3d. aside for forty years it would liquidate all the losses after the gains are credited.

"*Rents under this Scheme.*—It will be seen that as under this scheme the rents are not restricted I have taken them to be at the rate of 9s. 9d. per week, exclusive. It may be argued this is not sufficiently high, but it must be borne in mind that it is assumed that this sum will be obtained for the period of eighty years and is only 1s. per week in excess of that which is taken into consideration in Table II.

"*Gain and Loss under Table II.*

"Under Table II, which deals with a house built subject to 'special conditions' in respect of which a State subsidy of £9 per annum for forty years is received under the 1924 Act, figures are given showing the estimated deficiencies over the first sixty years and the gains on the last twenty. Adopting a similar method to that used in connection with Table I, a sum of £4 10s. per annum for forty years will wipe out the losses after the gains have been credited."

Now the conclusion to be drawn from these figures is that it is more economic for a local authority to adopt the provisions of the Act of 1924 than the Act of 1923, and this result should be anticipated, seeing that under the Act of 1924 the Government grant is £9 for forty years, whereas under the Act of 1923 it is but £6 for twenty years, and it appears to us the tax-payer may well ask, having regard to these figures, whether a case is made out for the larger and longer grant. Some little light is thrown upon this point by a further Table in this Report, giving the comparative annual cost for five hundred houses of the parlour type under the two Acts, and for this purpose the author of the Report has found it necessary for purposes of comparison to reduce the estimated annual deficiencies and surpluses to a common base of forty years. (See Table III.)

These figures surely raise the serious question whether the increased subsidy under the Act of 1924 is called for at all; or whether, having regard to the fact that private enterprise, if placed on an equal footing with the Corporations, would in all probability produce more houses if called for, it should not also apply to houses erected by private builders. The latest figures are given in this Report, showing that 54,287 houses had been authorised to be built by local authorities as against 107,258 by private enterprise. If the same stimulus were offered under the new Act to private enterprise as is offered to local authorities, there is no possible ground for not assuming that private enterprise would continue to lead the way. It really appears to come to this—that the largely increased subsidy and the prolonged period of subsidy are solely offered to secure houses being offered on rental, as it is alleged they are only offered for sale under the Act of 1923.

The increased and long-continued subsidy seems a high price to pay to attain what was the normal condition of things before the war—the letting of working-class dwellings at weekly rents. We are reminded in this Report that the Wheatley programme of 2,500,000 houses involves subsidies from Government and local authorities from 1923-4 to 1979-80 which would aggregate £1,376,240,000, or an average charge per annum for fifty-six years of £24,575,714, and we cannot see that such a commitment can be necessary. The provisions for breaks in the scheme have already done away with one of the reasons which, it was alleged, made it essential to lay down a scheme for so long a period; new methods and increased personnel are sure to be provided to meet a continued demand and, moreover, the sale of houses is a comparatively limited market, and private

TABLE I.

PARLOUR TYPE HOUSE NOT SUBJECT TO "SPECIAL CONDITIONS."
STATE SUBSIDY OF £6 PER ANNUM FOR TWENTY YEARS.
(Ordinary Loan Repayment Periods.)

	First 20 Years.	Next 10 Years.	Next 10 Years.	Next 20 Years.	Last 20 Years.
EXPENDITURE—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Loan Charges	29 19 4	27 3 5	26 12 2	26 12 2	1 5 4
Maintenance and Management Expenses	7 12 6	7 12 6	7 12 6	7 12 6	7 12 6
Total	37 11 10	34 15 11	34 4 8	34 4 8	8 17 10
INCOME—					
Rent 9s. 9d. per week	25 8 5	25 8 5	25 8 5	25 8 5	25 8 5
Government Subsidy	6 0 0	—	—	—	—
Total	31 8 5	25 8 5	25 8 5	25 8 5	25 8 5
BALANCE FALLING UPON RATES—					
Annual Deficiency	6 3 5	9 7 6	8 16 3	8 16 3	—
Annual Surplus	—	—	—	—	16 10 7

Note.—Calculated with accumulations at 3 per cent. per annum, the contribution required from rates to meet the annual deficiencies and surpluses shown above is equivalent to £7 3s. 3d. per annum for forty years.

TABLE II.

PARLOUR TYPE HOUSE SUBJECT TO "SPECIAL CONDITIONS."
STATE SUBSIDY £9 PER ANNUM FOR FORTY YEARS.
(Ordinary Loan Repayment Periods.)

	First 20 Years.	Next 10 Years.	Next 10 Years.	Next 20 Years.	Last 20 Years.
EXPENDITURE—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Loan Charges	29 19 4	27 3 5	26 12 2	26 12 2	1 5 4
Maintenance and Management Expenses	6 16 3	6 16 3	6 16 3	6 16 3	6 16 3
Total	36 15 7	33 19 8	33 8 5	33 8 5	8 1 7
INCOME—					
Rent 8s. 8½d. per week	22 14 3	22 14 3	22 14 3	22 14 3	22 14 3
Government Subsidy	9 0 0	9 0 0	9 0 0	—	—
Total	31 14 3	31 14 3	31 14 3	22 14 3	22 14 3
BALANCE FALLING ON RATES—					
Deficiency	5 1 4	2 5 5	1 14 2	10 14 2	—
Surplus	—	—	—	—	14 12 8

Note.—Calculated with accumulations at 3 per cent. per annum, the contribution required from the rates over the period is equivalent to £4 10s. per annum for forty years.

TABLE III.

Scheme for 500 Houses.	Equivalent Annual Cost per Annum for 40 years. Government Subsidy.	Corporation Subsidy.	Total.
Under the Act of 1923—			
(*a*) Assistance to private enterprise by lump sum grants	£2,178 17 4	£1,026 8 5	£3,205 5 9
(*b*) Provision of houses by Corporation ...	£2,178 17 4	£3,581 5 0	£5,760 2 4
Under the Act of 1924—			
Provision of houses by Corporation ...	£4,500 0 0	£2,250 0 0	£6,750 0 0

enterprise, if encouraged and reassured that rents would be secured, would inevitably revert to the practice of building houses which would be let.

The problem before the Government, therefore, appears to be how to combine all the schemes at present in existence so as to stimulate the local authorities and private enterprise alike, but at the same time, whilst giving reasonable security in the future which shall bring operatives into the building trade, not to pledge either the Government credit or that of the local authorities for such unreasonable sums or for such a long period. At present it appears to us that the nation is being asked to back the slowest horse. The local authorities have hitherto produced fewer houses than private enterprise, yet the subsidy to them has been increased, whilst that to private enterprise remains the same. Moreover, from the figures given in this Report, the difference between restricted and unrestricted rents appears to us to make the difference in the subsidy disproportionate.

We wish we could give more space to the matter contained in the Report itself, as we find it most suggestive and instructive. We have only given a few extracts, and although we have given the tables which show that the Act of 1924 places a less charge on the local authorities than the former Act, it must not be assumed that the Report approves one scheme more than another. There are some very practical criticisms of the Act of 1924, amongst which we may mention the effect on the general credit for all purposes of the local authorities if they are to raise such vast sums with the consequent rise in the interest they will have to pay on loans, and the risk of loss from loans sanctioned for such long periods to include such items as roadworks, sewers and buildings.

A HOUSING SUGGESTION

WE have received a little pamphlet which is entitled "Proposals for National Housing Rental Purchase," which contains a scheme under which by paying 1s. a week more than the economic rent tenants become owners of their houses in twenty years. This is not exactly one of the many untried schemes which are being put forward as suggestions to meet the present emergency, for it has its foundations on actual experiment, as it embodies a scheme initiated by Mr. Harold Morgan, the Secretary to the Shirecoaks Colliery Co., Ltd., Worksop, which has been in successful operation for eighteen months in the Colliery Company's new village.

The pamphlet must be read by anyone who wishes to obtain accurate information as to this scheme, and we can only give a very imperfect idea of some of its features. Very briefly, the scheme appears to amount to this: The local authority on the application of a prospective tenant-purchaser would advance the money and pay the builder for the erection of the house, which would be registered in the name of the tenant, subject to a mortgage. The mortgage interest is graduated according to the price of the house Up to the value of £500 it is 2½ per cent., £501 to £600, 3 per cent., and so on. The Government subsidy is to be the difference between the mortgage interest paid by the tenant-purchaser and the interest payable by the local authority or other agency. As the mortgages under the scheme are gradually paid off year by year, and as the subsidy would be payable on the outstanding balance of loans, the subsidy would be a gradually diminishing amount. There are tables in the pamphlet which show in detail how the Government subsidy is arrived at, at varying rates of interest chargeable to the local authority, the maximum cost of the subsidy, and all other necessary questions including the charges, &c., according to the price of the house, but perhaps we can give the best idea of the scheme by quoting from a table in which the working of the scheme is given in reference to a house costing £500, at a weekly rent of 11s. 4d., which with the 1s. added, makes a weekly payment of 12s. 4d. This table gives the amount of the Government subsidy according to various rates of interest at which the local authority has borrowed and shows the working of the scheme for the whole twenty years, but we will take the rate of interest at 4½ per cent., and only show the working of the scheme for three years as the rest can be gathered from that:—

	Loan.	Mortgage interest charged to tenant at 2½ per cent.	Total.	Deduct payments at 12s. 4d. per week.	Balance at end of year.	Government subsidy 2 per cent.
1st year ..	£500 0 0	£12 10 0	£512 10 0	£32 1 4	£480 8 8	£10 0 0
2nd year ..	480 8 8	12 0 3	492 8 11	32 1 4	461 7 7	9 12 2
3rd year ..	460 7 7	11 10 2	471 17 9	32 1 4	439 16 5	9 4 3
20th year ..	31 9 4 ..	15 9 ..	32 5 1	32 1 4 ..	3 9 ..	12 7

We have given the first three years and the twentieth year.

We may mention that one great advantage claimed for the scheme is that there is no compulsory deposit, as even the finding of a small amount of capital is an obstacle in the way of a working man who desires to acquire a house. But if a deposit is voluntarily paid the tenant at once gets the advantage as the weekly payment is then reduced. It may be mentioned that the scheme provides for registration of title by the local authority, rendering conveyance simple and cheap, and this point bears upon another question, which is also dealt with in the pamphlet, as in cases of misfortune transfer of the house is simple and either a smaller house can be acquired or, as explained in the text, an alternative mortgage can be obtained. We endorse all that the author says as to the advantages of encouraging the working classes to own their own houses, and if these houses could be transferred readily and economically one great obstacle to the workman's purchasing his house, *i.e.*, his uncertainty as to whether he may have to change his neighbourhood, would be got over as, possibly, should this system become universal a sort of "Labour Exchange" of houses could be set up throughout the country.

We consider this scheme well worthy of consideration, and we may mention that the Caterham Urban District Council has in working a scheme somewhat on the same lines. That scheme includes an endowment insurance policy, but a deposit of £40 is required. Mr. Morgan shows how insurance can also be combined with his scheme. In conclusion, we should say that according to Mr. Morgan's pamphlet, where tables will be found showing the maximum cost of the subsidy, it is stated that the Government Subsidy will only be higher than in the 1923 Act in a few cases where 5 per cent. has to be paid for loans, by the local authority, but in only one case where the rate is 4½ per cent., whilst there is every reason to believe that the flat rate would be lower as the average subsidy must show a reduction. He further points out that there is no possibility of any future charge on the rates in the case of houses erected under his scheme.

Infirmary Extension.

Four foundation stones were laid recently in connection with a new wing to the Knaresborough Poor Law Institution Infirmary. The wing, at the north-west of the institution, is to provide thirty additional beds for the female ward at a cost of £3,000. Mr. J. Houfe is the architect.

THE PRIME MINISTER ON HOUSING

IN his speech at the Albert Hall on December 4 the Prime Minister made an important pronouncement on housing. He is reported as having said, "We differ profoundly from the Socialists in one matter. We want to see people own their homes, and we shall devise every fair means we can to extend the class of occupying owner. We want to see more and not less of private property. We want it more spread."

Further on in the speech he is reported as saying that for some time there must be rent restriction, as not only in this country, but in several countries in Europe, there has been the same sequence of events, "the falling away of building during the war; the resulting shortage of houses; the threatened rise of rent; the intervention of the State to protect the tenant; the rise of prices of commodities generally, of building material in particular, and then the failure of rent to rise in correspondence, the stoppage of house building; the attempts of the State to fill the gap; the failure of the State to fill the gap—and we shall not attempt to fill it by direct building at ruinous prices. We prefer to set in action and to stimulate, as Mr. Neville Chamberlain has done, the resources of private enterprise, and when we have substantially increased the number of small houses we shall feel free to decontrol."

This is a good summary of the whole housing position, and we need not say we are in complete agreement with that part of the speech which supports private enterprise and private ownership, but the subsidy plays an important part in both. Under the Housing Act of 1924 the private builder has been deliberately placed at a disadvantage compared with the local authorities, as the avowed object of that Act was to encourage the building and letting of houses by the local authorities or a society, body of trustees, or a company, and the increased subsidy of £9 in place of £6 only applies to such bodies erecting houses to be let on the "special conditions."

Various schemes have lately been devised, some of which have been put into actual practice, to enable the working man to own his house, and the subsidy forms an essential element in the success of such schemes, as it enables the purchase to be made by the payment of annual sums over a period of twenty years, such sums, with the aid of the subsidy, exceeding the economic rent by a very small amount. These schemes have been based upon the £6 subsidy, and yet the annual sums payable as "purchase rent" are not quite prohibitive, and it has also been shown that were such schemes adopted on a large scale it is possible when a flat rate can be applied that the average subsidy might be capable of reduction. It is important to note that these schemes only contemplate a subsidy for twenty years and not for forty, as applied to the local authorities and other bodies.

No Government ever desires to repeal a measure recently passed by its predecessor, but the same objection cannot be applied to an amendment of that measure, and it applies even less to the Act of 1924 than to ordinary Acts, since that Act is made subject to a periodical review, and any amendment should be directed to doing away with the inequality of the subsidy to private persons under the Act of 1923 as compared with the subsidy to local authorities and other bodies under the Act of 1924. If the increased subsidy of £9 could be given to private persons erecting houses, even were the period twenty years in place of forty years, and could this subsidy take the form of a lump sum, as could the lesser subsidy under the Act of 1923, an incentive would be given to private owners to accept the "special conditions" as to letting which are imposed under the Act of 1924, and we imagine the object which the Prime Minister has at heart—the stimulation of private enterprise—would be considerably forwarded; but if his second object, "house owning," is also to be facilitated, we should suggest that the "special conditions" also require amendment so as to embrace such "rental purchase" schemes as we have referred to above.

NEW BUILDINGS IN LONDON

Southwark.—The Bishop of Southwark has made an appeal for funds to enable a much-needed scheme of restoration and repair to the Cathedral to be carried out. It is hoped to raise £10,000, and to make reparations to the fabric and to the organ, install a better lighting system, &c. The plans have been prepared by the Cathedral architect, Mr. Charles J. Blomfield, of 13, Ashburn-gardens, South Kensington, S.W. 7.

London.—Messrs. John McManus, Ltd., are carrying out building operations on the following sites:—Dollis Hill-lane, Church Hall; Mr. W. Charles Waymouth, F.R.I.B.A., architect. The Hall, Catford, alterations and redecorations; Mr. T. F. Ingram, A.R.I.B.A., architect. 15, Bethnal Green-road, alterations and redecorations; Mr. T. F. Ingram, A.R.I.B.A., architect. Worton-road, Isleworth, extensions to bungalow. Hammersmith, additional accommodation for employees at the Electricity Department, Fulham Palace-road, for the Borough Council.

Tower Hill.—The old "Crooked Billet" Tavern on Tower Hill is being demolished. In its place is being erected an up-to-date, modern public house, for Messrs. Huggins & Co., Ltd., the brewers and owners of the property. The proposed building consists mainly of brickwork and timber construction, with a faience front, concrete and asphalted roof. Efficient systems of electric lighting and heating are being installed. The contractors for this work are Messrs. E. A. Roome & Co., Ltd., of Hackney. The architect for the scheme is Mr. Alfred Burr, F.R.I.B.A., 85, Gower-street, E.C.2.

Waterloo-place.—A large site in Waterloo-place, on the east side, is now being excavated preparatory to building operations being started. A new building of offices is to be erected, of five stories in height. The premises will be of a design similar to the building of Cox's Bank opposite, and are, in fact, designed by Mr. Durward Brown, of 12, Regent-street, S.W.1, one of the joint architects to the bank. A steel framework will carry the building, which will be faced with Portland stone. The floors will all be of concrete construction, finished with asphalte. The interior equipment will include a lift to serve the floors above, heating and electric lighting systems, &c. The windows will all be of the steel casement type, and a certain amount of art metal work will be introduced. The roof will be a mansard and will be covered with slates. The contractors are Messrs. Holland & Hannen, and Cubitts, Ltd., of 258, Gray's Inn-road, London, W.C.1.

Fenchurch-street.—The site at the corner of Fenchurch-street and Billiter-street, London, E.C.3, has been cleared of old buildings, the present leases being expired, and a new block of offices is to be erected in their stead. The new building will incorporate all modern improvements and will provide six floors of offices, all designed for letting purposes. A Portland stone fronted building carried on a steel girder framework is to be erected, with its entrance on the apex of the site. Heating on the low-pressure hot-water system from a central boiler-house will be installed and a lift, worked by electrical power, will run from the basement to the top floor. The entrance and lobby will be paved in marble, and the joinery work will be in mahogany. The architects are Messrs. Gunton & Gunton, of Finsbury House, Bloomfield-street, London, E.C.2.

Stamford-street.—A five-story warehouse is to be built on the site of Nos. 6 and 8, Stamford-street, E.1, for Messrs. Burn Bros. (London), Ltd., sanitary engineers, &c., of Blackfriars-road, S.E.1. The new building is to be of brick facings with stone dressings for windows and doorways. There will be accommodation for offices and warehouse space and the floors will be of fireproof design. The loads will be carried by a steel frame supplied and erected by Messrs. Redpath Brown & Co., Ltd., of 3, Laurence Pountney-hill, E.C.3. The roof will be of slate. The contractors are Messrs. Higgs & Hill, Ltd., of Crown Works, South Lambeth-road, London, S.W.8. The architect is Mr. T. H. Smith, of 17, Basinghall-street, London, E.C.2.

Regent-street.—Another new building in Regent-street is to be provided on the site of Nos. 149–151. Here will be erected a six-floored block of offices and shops, with extensive basements. The premises will be similar to all of those in this street, built of Portland stone facings, on a steel framework. The floors will be of fireproof construction, whilst the walls will be of fibrous and plain plaster decoration. Marble will be used for linings and skirtings on the principal entrances and corridors. All joinery will be in English and foreign hardwoods. Lifts will be fitted to serve all floors. Electric lighting will be installed and central heating on the low-pressure system will be provided. Points for fitting vacuum cleaning apparatus will also be wired on each floor. The shop windows will be of metal, of ornamental design, with bronze lettering. All other casements will be of steel. The general contractors are Messrs. Trollope & Colls, Ltd., 5, Coleman-street, London, E.C.2. The steelwork frame will be supplied and erected by Messrs. Moreland, Hayne & Co., Ltd., of 80, Goswell-road, London, E.C.1. The architects are Messrs. Skipwith, Gordon & Gordon, of 5, Old Bond-street, London, W.1.

Regent-street.—Building is to commence this month on the new shops and offices designed to replace the old premises at Nos. 93, 95, 97 and 97A, Regent-street, with large frontages also in Swallow-street. The new building will be six stories in height, and excavations to a depth of about 30 ft. is being made to provide for two basements. There will be four large shops on the street level, with showrooms above and below if required. The first to fifth floors will be used as offices, &c. The front elevation has been approved by H.M. Office of Works and Forests and will be executed in Portland stone, enriched with bronze ornamentations and art metal decorative work. The mansard roof will be covered with green Cumberland slates on the pitched slopes and will have a top roof of concrete, finished with asphalte. A steel-framed building, it will be rendered fireproof throughout by the provision of reinforced concrete floors, doors, sprinklers and hydrants. Steel casements will be used for all windows, whilst the display fronts for the shops will be of bronze or brass. There will be two lifts and complete systems of heating, lighting, ventilating and vacuum cleaning. The architect is Mr. S. Gordon Jeeves, of George-street, Hanover-square, W.1.

Sutton-lane.—The licensed premises, the "Queen's Head," at Sutton-lane, Chiswick, W.4. are to be rebuilt upon the present site and the accommodation practically trebled. The new building will be of three stories, and will be erected in brickwork with steel girders placed to carry the principal loads, A certain amount of timberwork on the front of the house is provided for. Inside the equipment and fittings will be of oak or mahogany. Plans have been prepared by Mr. Malcolm T. Sanders, architect, to Messrs. Watney, Combe, Reid & Co., Ltd., the owners of the premises.

Strand-on-the-Green.—The "Steam Packet" in Strand-on-the-Green is to be rebuilt. A building of the half-timbered style is proposed, erected in good quality facing brick, and a slated roof. Accommodation will be provided for private and public bars, luncheon room, domestic and staff quarters, lavatory, cellarage, offices, &c. The interior woodwork will be chiefly of oak, whilst the walls will be of plaster and distempered. The architect is Mr. Nowell Parr, of 42, Cranley-gardens, South Kensington, S.W.7.

Coldharbour.—The Coldharbour Estate at Croydon is to be developed for housing purposes and an expenditure of about £10,000 is anticipated on the lay-out of new roads and the provision of houses. Various designs for houses and residences will be adopted, providing three and four bedrooms, living room and parlour accommodation, &c. The surveyors to the Coldharbour Estate, Ltd., are Messrs. Hooker & Rogers, of 4, High-street, Croydon.

Haywards Heath.—A new church for the Roman Catholic denomination is to be built at Haywards Heath, and building operations are likely to start in the near future. Plans for an edifice of brick erection with stone dressings is proposed, to hold about 300. The interior will be finished in plaster and distempered. The furnishings will be in oak. The architect is Mr. John H. Beart Foss, of 9, The Common, Ealing, London, W.5.

Gray's Inn-road.—A row of shop premises is to be erected in Gray's Inn-road, constructed in brick, with artificial stone dressings and mahogany shop fronts. The contractors are Messrs. W. F. Blay, Ltd., of Spital-street, Dartford and Dowgate Hill, E C.4. The architects are Messrs. North, Robin & Wilsdon, 35–39, Maddox-street, W.1.

London Wall.—The premises known as Glendinning Restaurant at No. 34, London Wall, E.C.2, have been acquired by a building society for new offices. Internal alterations are to be made and electric lighting and heating apparatus installed. The architect is Mr. J. H. Lovegrove, of 374, Old-street, London. E.C.2.

Old Bond-st.—The large premises at the corner of Burlington-gardens and Old Bond-street, W.1, known as No. 24 in the latter street, and owned by Messrs. J. & E. Atkinson, Ltd., the perfumers, are to be rebuilt. The new building will be designed in the Tudor style and its Portland stone elevations to Old Bond-street and Burlington-gardens will be enriched with all the ornamentations of that period. There will be six floors in all, of which the ground floor will be used by Messrs. Atkinson as a shop and showroom. The fittings and shop windows will all be in oak and carved in the Tudor manner, Leaded and glazed window casements will also be in keeping with the architecture. The floors will be of concrete. The roof will be pitched, with dormer window openings, and will be covered wih lead sheeting. The rain-water pipes and heads will be cast-iron or lead. The architect is Mr. E. Vincent Harris, F.R.I.B.A., of 29, St. James's-square, London, S.W.1.

The Lodge, Aldershot.

In the advertisement of "The Edwardian Down Draught Prevention Chimney Pot" of the Fawcett Construction Co., Ltd., 65, Victoria-street, Westminster, S.W., in our last issue, an illustration was given of The Lodge, Aldershot. The name of the architects was printed incorrectly, and should have read Messrs. Kingham & Kingham, Aldershot.

Ionic Cap at New Premises at Broadway, Westminster.

[This Cap was designed by Messrs. John Daymond & Sons, Ltd. The architect of the building, which was illustrated in our issue for November 28, is Mr. H. J. S. Abrams.]

WORKMEN'S COMPENSATION

Winding up Orders.

AN important point in connection with the new Workmen's Compensation Act of this year has been decided by a Divisional Court in the case in the matter of Clemmons Aluminium, Ltd. (*The Times*, November 26). A workman in the employ of the Company had suffered injuries by accident which had resulted in total disablement, and he had been paid weekly payments as compensation, until in September, 1923, the Company went into liquidation. Under section 5 of the principal Act, the Workmen's Compensation Act, 1906, sums due in respect of compensation were made debts entitled to preferential payment, but only to the extent of £100 in any individual case, and where the compensation was a weekly payment for the purposes of this provision it was to be taken to be the amount of a lump sum for which the weekly payments could be redeemed, as if the employer made an application under Schedule I par. (17) of the principal Act. The sum in this case so assessed amounted to £950.

Section 19 of the new Act has considerably amended section 5 of the old Act. Where the insolvent company has entered into a contract with insurers by subsection (1), the rights of the Company against the insurers are transferred to and vested in the workman, but where no such contract has been entered into the amount due in respect of any compensation, the liability wherefor accrued before the appointment of a receiver, or of debenture holders taking possession, shall be included amongst the debts which, under section 107 of the Companies (Consolidation) Act, 1908, are to be paid in priority to all other debts. Then in subsection (2) of the above section 19 it is provided "The limitation to £100 in any individual case on the amounts due by way of compensation which under section 5 subsection (3) of the principal Act are to be included in the debts to be paid in priority to other debts in the case of a bankruptcy or winding-up shall cease to have effect."

The question raised in this case was whether the new Act applied, the winding-up proceedings having commenced in September, 1923, but not been completed, nor the above lump sum paid, before January 1, 1924, when the new Act came into operation, and it will be seen if the old Act was to apply only £100 of this sum could be treated as a preferential debt, whereas if the new Act applied the whole sum would be so treated.

The Court held that the old Act remains in force where existing rights were in force before the new Act came into operation, for it was a general rule that an interpretation should not be placed on an Act which was prejudicial to existing and accrued rights if that could be avoided. There would be other rights which had accrued to other persons in such a case as this, and unless a contrary intention was expressed in the new Act, the rule of interpretation in section 38 of the Interpretation Act, 1889, applied that former Acts were not to be taken as repealed. Section 19 subsection (1) of the Workmen's Compensation Act, 1923, was clearly a prospective provision, and subsection (2) was in general terms and did not repeal the £100 limit.

The result was that until the new Act came into force the right to a priority in payment was governed by the old Act.

New Bridge Across the Tyne.

Newcastle City Council recently agreed to accept the tender of Messrs. Dorman Long & Co., at a price of £571,225, for the construction of a bridge across the Tyne between Newcastle and Gateshead, for which an Act of Parliament has been obtained. This was the lowest tender. The next was that of Messrs. Cleveland Bridge & Engineering Co., at £604,421. The highest tender was £743,938. The cost of the works will be approximately £1,000,000.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Bricklayers.	C'p'ters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/5	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London { 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

(For rates of wages in the Building Trade in Scotland, see page 959)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING AND PAINTING.

DECEMBER 13.—**Blything.**—ROOMS.—For two bath rooms, in wards at the Union, for the B.G. Mr. J. W. Tallop, Clerk to the Guardians, Clerk's Office, Bulcamp, Halesworth.

DECEMBER 13.—**Newcastle-upon-Tyne.**—PAINTING.—For painting work required at the Relief Offices, 130, Byker-bank, and 71, Park-road, and at the Children's Home, "Louisville," Ponteland, for the B.G. Mr. Gladstone Walker, Clerk to the Guardians, 127, Pilgrim-street, Newcastle-on-Tyne.

DECEMBER 13.—**Plymouth.**—EXTENSION.—For extension to the wholesale meat market, for the C.B. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices. Deposit £2 2s.

DECEMBER 13.—**Wallingford.**—ALTERATIONS.—For alteration and extension of the pump-house at the Waterworks, for the C.B. Mr. F. R. Hedges, Town Clerk, Wallingford.

DECEMBER 13.—**Westgate-on-Sea.**—PAVILION AND BATHING ACCOMMODATION.—Erection of (1) pavilion, (2) bathing accommodation and public convenience, for the Westgate-on-Sea Council. Mr. F. J. Cornford, Town Hall Buildings, Westgate-on-Sea. Deposit £1 1s.

DECEMBER 15.—**Banbridge.**—ADDITIONS.—For alterations and additions to Banbridge R.U.C. Barracks, for the Government of Northern Ireland. Mr. W. R. Maconkey, Assistant Secretary, Ministry of Finance, Belfast.

DECEMBER 15.—**Barnsley.**—PAINTING.—For painting and decorating Buckley-street P.M. Church. Mr. J. T. Steel, 73, Commercial-street.

DECEMBER 15.—**Bournemouth.**—HOUSES.—For erection of 21 pairs of semi-detached houses on the Southhill estate, Winton, for the C.B. Mr. F. P. Dolamore, Borough Engineer and Surveyor, Town Hall. Deposit £1 1s.

DECEMBER 15.—**Cardiff.**—HOUSES.—For erection of 36 houses at Ely, for the T.C. Mr. C. G. Brown, Town Clerk, City Hall. Deposit £2 2s.

DECEMBER 15.—**Dewsbury.**—ADDITIONS.—For the excavators, bricklayers and masons, carpenters and joiners, plumbers and glaziers, plasterers, slaters, and painters' work required in the erection and completion of proposed pavilion and mortuary at Whitley Grange Hospital, for the C.B. Mr. Holland Booth, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 15.—**Dewsbury.**—PAINTING.—For external painting of shop premises in the covered market, stores department and switch-boxes in the open Market, for the C.B. Mr. H. Booth, Town Clerk, Town Hall

DECEMBER 15.—**Guildford.**—EXTENSION TO SLIPPER BATHS AND PUBLIC CONVENIENCE.—Extension to slipper baths and public convenience, for the Borough of Guildford. Mr. W. G. Cross, Assoc.M.Inst.C.E., Borough Engineer, Municipal Offices, Tuns Gate, Guildford. Deposit £2 2s.

DECEMBER 15.—**London, E.C.2.**—REDECORATION.—Redecoration of the Shoreditch Town Hall, Old-street, E.C.2, for the Shoreditch Borough Council. Mr. T. L. Hustler, Borough Surveyor, Town Hall, Old-street, E.C.2. Deposit £2 2s., to the Borough Accountant's Office.

DECEMBER 15.—**Maidstone, Kent.**—COUNCIL SCHOOL.—Erection of a Council School for 340 boys at Rose-street, Sheerness, in the County of Kent, for the Kent Education Committee. County Education Architect (Mr. W. H. Robinson, F.S.Arc.), at Room 69, Sessions House, Maidstone. Deposit £2 2s. in the form of a cheque payable to the Kent Education Committee, and crossed "National Provincial Bank of England, Ltd."

DECEMBER 15.—**Middlesbrough.**—EXTENSION.—For extension of Holgate institution nurses' home, for the B.G. Mr. H. Bilson, Clerk to the Guardians, Poor Law Offices, Municipal Buildings. Deposit £2 2s.

DECEMBER 15.—**Penarth.**—HOUSES.—For building of 30 houses proposed to be erected on sites in Andrew-road, Cogan for the U.D.C. Mr. J. W. Morris, Clerk, Council Offices. Deposit £2 2s.

DECEMBER 15.—**Plymouth.**—REPAIRS.—For repairs to premises, 10, East-street, Stonehouse, for the C.B. Mr. R. J. Fittall, Town Clerk, Municipal Buildings.

DECEMBER 15.—**Pontllanfraith.**—SCHOOL.—For erection of a new secondary school, for the Monmouthshire E.C. Mr. C. Dauncey, Secretary, County Hall, Newport, Mon. Deposit £2 2s.

DECEMBER 15.—**Rhyl.**—TOWER.—For erection of a water tower in reinforced concrete, for the U.D.C. Mr. T. Amos Jones, Clerk to the Council, Council Offices, Clwyd-street.

DECEMBER 15.—**Saddleworth.**—POLICE STATION.—For erection of a new police station, for the West Riding C.C. Mr. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield. Deposit £1.

✱DECEMBER 15.—**Warwick.**—SECONDARY SCHOOL.—Erection of a secondary school in Clifton-road, Rugby, for the Warwick C.C. Mr. A. C. Bunch, F.R.I.B.A., County Architect, 27, Binswood-avenue, Leamington Spa. Deposit £2 2s.

DECEMBER 16.—**Bedwellty.**—REPAIRS.—For repairs to cottage homes, Blackwood, for the B.G. Mr. W. Hall, Clerk to the Guardians, Union Offices, Tredegar.

DECEMBER 16.—**Carlton.**—HOUSES.—For erection of 16 houses on the Conway-road site, for the U.D.C. Mr. E. W. Turpin, Clerk, Free Library. Deposit £1 1s.

DECEMBER 16.—**Castleford.**—EXTENSIONS.—For erection of a new boys' department at Temple-street Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

DECEMBER 16.—**Chadderton.**—HOUSES.—For erection of 8 houses, in two blocks of 4, in Taylor-street, for the U.D.C. Mr. J. Schofield, Clerk of the Council, Town Hall. Deposit £1 1s.

DECEMBER 16.—**Dublin.**—ADDITIONS.—For erection of a new wing to the National Library, Dublin, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 16.—**Liverpool.**—ALTERATIONS.—For alterations, painting and decorating the interior of mansion house, Bowring Park Estate, Roby, for the T.C. Mr. W. Moon, Town Clerk, Municipal Buildings.

DECEMBER 16.—**Ludlow.**—POST OFFICE AND TELEPHONE EXCHANGE.—Erection of a new Post Office and Telephone Exchange, at Ludlow, for the Commissioners of H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

DECEMBER 16.—**Newmarket.**—CONVENIENCE.—For erection of a public convenience in Fountain-lane, Soham, for the R.D.C. Major S. J. Ennion, Clerk to the Council, Deva Chambers.

DECEMBER 16.—**Scunthorpe.**—HOUSES.—For erection and completion of 30 houses, for the U.D.C. Mr. J. F. Auld, Clerk to the Council, Council Offices. Deposit £2.

DECEMBER 16.—**Skelthwaite.**—BUILDING.—For all or any trades in connection with the building for refuse destructor plant, for the U.D.C. Mr. Edgar Freeman, Clerk to the Council, Town Hall.

DECEMBER 16.—**Wakefield.**—ALTERATIONS.—For alterations required at Queensbury Upper Council School, for the West Riding C.C. The Education Department, County Hall, Wakefield.

DECEMBER 16.—**Witham.**—HOUSES.—For erection of 12 houses or any portion of that number on the Cocks's Farm site, for the U.D.C. Mr. F. H. Bright, Clerk.

DECEMBER 17.—**Greasbrough.**—HALL.—For erection of a public hall, &c., for the U.D.C. Mr. John H. Jackson, Clerk to the Council, Council Offices. Deposit £2.

DECEMBER 17.—**Risca.**—HOUSES.—For erection of 150 houses on the Ty-isaf site, for the U.D.C. Mr. A. J. Dardis, Surveyor and Engineer, Council Offices, Risca (Mon). Deposit £2 2s.

DECEMBER 17.—**Rowley Regis.**—BATHS.—For a concrete open-air swimming bath at Haden Hill Park, with the necessary dressing-rooms, for the U.D.C. Surveyor, Council Offices, Old Hill, Staffordshire. Deposit £1 1s.

DECEMBER 18.—**Chelsea.**—PAINTING AND REPAIRS.—Internal plastering, painting and repairs to one of the wards and annexes thereto, at the Hospital, Cale-street, Chelsea, for the Guardians of the Poor of Chelsea. Guardians' Architect, Mr. Edmund J. Harrison, Lic.R.I.B.A., 23, Berkeley-road, Crouch End, N.8. Deposit £2

DECEMBER 18.—**Marsden.**—ADDITIONS.—For additions and alterations to the sewage works, for the U.D.C. Mr. H. Greenwood, Clerk to the Council, Council Offices, Marsden, near Huddersfield. Deposit £1 1s.

✱DECEMBER 18.—**Poole.**—HOUSES.—Erection of 48 houses (non-parlour type) in Grove-road, Granville-road, and Blandford-road, Hamworthy, at an average price of £462 per house, inclusive of paths, drains and fences, for the Borough Council of Poole. Borough Surveyor, Municipal Buildings, Poole.

DECEMBER 19.—**Ireland.**—PAINTING.—For internal and external painting works at the Curragh Camp, co. Kildare, for the Commissioners of Public Works. Mr. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 20.—**Abercrave (Glam).**—HALL.—For construction of a hall, for the Abercrave and District Miners' Welfare Committee. Mr. D. Thomas, architect, Ammanford. Deposit £2 2s.

DECEMBER 20.—**Boston.**—HOUSES.—For 20 houses in blocks of two on the Corporation Woodville-road site, for the T.C. Mr. G. E. Clarke, Borough Surveyor.

DECEMBER 20.—**Manchester.**—PAINTING.—For painting the dayrooms and dormitories at the Tame-street Institution, Ancoats, for the B.G. Mr. J. Macdonald, Clerk to the Guardians, Union Offices, All Saints.

DECEMBER 20.—**Rathdrum.**—REPAIRS.—For repairs to cottages provided under the R.D. Scheme No. 49, in accordance with plan and specification prepared by the Engineer, Sailors' and Soldiers' Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Mr. R. E. Beckerson, Chief Clerk. Deposit £1 1s.

DECEMBER 20.—**Redcar.**—HOUSE.—For erection of a house at 150, High-street, Redcar, for Mrs. H. Randall. Mr. J. Jackson, architect, Marske.

DECEMBER 20.—**Rye.**—EXTENSIONS.—For enlarging engine house, for the T.C. Mr. W. Dawes, Town Clerk, Bank Chambers.

DECEMBER 22.—**Brighton.**—HOUSES.—Erection of 11 houses in Hereford-street, Brighton, for the County Borough Council of Brighton. Borough Surveyor, Town Hall, Brighton. Deposit £1.

DECEMBER 22.—**Bucklow.**—BUILDING.—For a veranda at the Institution Hospital, Knutsford, for the B.G. Mr. G. Leigh, Clerk to the Guardians, Union Offices, Knutsford. Deposit 10s. 6d.

DECEMBER 22.—**Edinburgh.**—EXTENSION.—For brick, &c., carpenter, joiner and glazier, plaster and harling, plumber at Tynecastle school, for the E.C. Mr. J. Stewart, S.S.C., Executive Officer, Education Offices.

✱DECEMBER 22.—**France and Belgium.**—HEADSTONES.—Tenders for a total supply of 20,000 headstones, packed and delivered (f.o.r.), to be divided into a number of contracts, none of which shall be for less than 100 headstones, for the Imperial War Graves Department. The Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, London, W.1, and marked "Headstone Contract, 5079/W."

DECEMBER 22.—**Manchester.**—BOILER HOUSE.—For erection of a boiler house, timber store, &c., at the Hyde-road car depot, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 22.—**Shoeburyness.**—CONVENIENCE.—For the enlargement of the existing public conveniences upon the Common at Shoeburyness, and the construction of a public convenience and refreshment room on Whitakers-parade, Rampart-street, Shoeburyness, for the U.D.C. Mr. F. Gregson, Clerk, 46, Alexandra-street, Southend-on-Sea.

DECEMBER 23.—**Cork.**—BUILDING.—For building of new premises at 13-17, Patrick-street, for Messrs. Roches Stores, Ltd. Secretary, Roches Stores, Ltd., Patrick-street, Cork.

✱DECEMBER 23.—**Guildford.**—HOUSES.—For erection of three pairs of non-parlour houses on the Peaslake site, in the parish of Shere, for the Guildford R.D.C. Mr. John Anstee, Council Architect, Council Offices, Commercial-road, Guildford. Deposit £2 2s.

DECEMBER 23.—**London.**—SLATING.—For re-slating the roofs of the nurses' home and the out-relief offices and dispensary, Fulham Palace-road, for the B.G. Mr. E. J. Mott, Clerk to the Guardians, Guardians Offices, 129, Fulham Palace-road, W.6.

DECEMBER 23.—**Southampton.**—COTTAGES.—For erection of two pairs of cottages on a site at the corner of Dickens-lane and the main road 2 miles from Basingstoke, for the C.B. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s.

DECEMBER 24.—**Huddersfield.**—HOUSE.—For erection of a detached residence in Thornhill-road. Messrs. J. Berry & Sons, 3, Market-place, Huddersfield.

DECEMBER 29.—**Kiveton Park.**—HOUSES.—For erection of 28 houses, for the R.D.C. Mr. A. Lawrence Lewis, Clerk to the Kiveton Park R.D.C., Council Offices, Kiveton Park, near Sheffield.

DECEMBER 29.—**Leeds.**—HOUSES.—For trades in connection with the erection in brick or other forms of construction of 150 houses on the Crossgates Estate, 250 on the Middleton Estate, and 100 on the Meanwood Estate, for the T.C. Mr. W. T. Lancashire, City Engineer, Municipal Buildings. Deposit £1 1s.

DECEMBER 29.—**Worthing.**—SHELTER.—For erection of a glazed shelter in the Denton-gardens, for the C.B. Mr. J. Kennedy Allerton, Town Clerk, Municipal Offices. Deposit £1 1s.

DECEMBER 30.—**Burslem, Staffs.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Burslem, Staffs, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners of H.M. Works, &c.)

DECEMBER 31.—**Blyth and Cuckney.**—DISPOSAL WORKS.—For construction of sewerage and sewage disposal for the parishes of Hodsock and Carlton, for the R.D.C. Mr. A. H. Styring, Clerk, 6, North Church-street, Sheffield. Deposit £5.

✱DECEMBER 31.—**Dartford.**—WEIGHBRIDGE FOUNDATIONS, &C.—Forming weighbridge foundations and visitors' waiting rooms at the Southern Hospital, Dartford, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4 Deposit £1.

✱DECEMBER 31.—**Kent.**—CLEANING AND PAINTING.—Cleaning and painting works at White Oak, Swanley Junction, Kent, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

JANUARY 1, 1925.—**Lincoln.**—ADDITIONS.—For additions to the C.C. Offices, Newland House, Lincoln, for the Lindsey C.C. Mr. Eric W. Scorer, Clerk of the County Council, County Council Offices, Mint-street. Deposit £2 2s.

✱JANUARY 2.—**Bolton.**—EMPLOYMENT EXCHANGE.—For adaptation of the old Post Office, Bolton, to form an Employment Exchange, for the Commissioners of His Majesty's Office of Works. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners of H.M. Works, &c.)

✱JANUARY 2.—**Plymouth.**—HOUSES.—Erection of 800 houses (whole or part) at North Prospect (Sections 2 and 3), for the County Borough Council of Plymouth. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Offices, Plymouth. Deposit £5 5s.

✱JANUARY 3.—**Swallowfield, Berks.**—SCHOOL.—For the erection of a new Council school for 104 children, at Farley Hill, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £1 1s.

JANUARY 5.—**Bolton-upon-Dearne.**—HOUSES. For erection of 74 houses, together with road and surface water drainage works in Barnborough-lane, Goldthorpe, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices, Bolton-upon-Dearne. Deposit £1 1s.

JANUARY 5.—**Goldthorpe.**—HOUSES, &C.—For the erection of 74 dwelling houses, together with road and surface water drainage works, in Barnborough-lane, or in sections (1) 30 houses, (2) 44 houses, (3) roads and surface water drainage works, for the Bolton-upon-Dearne U.D.C. Mr. William H. Adams, M.S.A., Council Offices, Bolton-upon-Dearne. Deposit £1 1s.

✱JANUARY 10.—**Congleton.**—SCHOOL.—Erection of an elementary school (based on firm prices) for 600 scholars, at New-street, Congleton, for the Corporation of Congleton. Mr. J. H. Walters architect, Moody-street, Congleton. Deposit £2.

JANUARY 12. — **Birmingham.** — ADDITIONS. — For building alterations and additions at Dudley-road Hospital, for the B.G. Mr. J. Curtis, Clerk to the Guardians, Union Offices, Edmund-street. Deposit £10 10s.

✱JANUARY 14.—**Stafford.**—OPERATING THEATRE.—Tenders for new operating theatre and consequent small alterations at the existing Infirmary, for the Board of Management of the Staffordshire General Infirmary, Stafford. Secretary at the Infirmary. Deposit £2.

NO DATE.—**Fairfield.**—EXTENSIONS.—For erection of extensions to the girls' high school, Fairfield, near Manchester, for the Lancashire E.C. Mr. G. Hammond Etherton, Clerk of Lancashire C.C., County Offices, Preston. Deposit £2.

NO DATE.—**Kilmarnock.**—PAINTING.—For painter work in connection with the erection of 30 houses, for the T.C. Mr. W. Dunbar, Burgh Surveyor, Market Bridge.

NO DATE.—**Kirkintilloch.**—HOUSES.—For works in connection with the erection of six houses at Hillhead site, for the T.C. Mr. Wm. Baillie, Lic.R.I.B.A., architect, 2, West Regent-street, Glasgow.

✱NO DATE.—**Portsmouth.**—ROOF.—For the erection of a Mansard roof at Chandos-street, for Messrs. Timothy White Co., Ltd. Construction Department, 30, Chandos-street, Portsmouth.

NO DATE.—**St. Albans.**—HOME.—For erection and completion of Children's Home, Oster Hill, for the B.G. Mr. E. F. W. Hieatt, Clerk to the St. Albans Board of Guardians. Chequer-street. Deposit £2 2s.

FURNITURE, MATERIALS, etc.

DECEMBER 13.—**Kent.**—GRANITE.—For supply of various granite, for the C.C. Mr. H. T. Chapman, County Surveyor, St. Peter-street, Maidstone.

DECEMBER 15.—**Edmonton.**—PIPES.—For supply and delivery of about 700 tons of cast-iron pipes and specials, for the U.D.C. Mr. C. Brown, Engineer and Surveyor, Town Hall. Deposit £3 3s.

DECEMBER 15. — **Rotherham.** — SEWERAGE. — For materials required in the construction of (1) sewage disposal works (tanks and filters); (2) approximately 2,500 yds. of 12 in. and 9 in. pipe sewers; (3) inserting 12 in. sewer under canal, for the R.D.C. Mr. C. O. Rawstron, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate. Deposit £1 2s.

DECEMBER 16.—**Tottenham.**—BLOCKS.—For supply of creosoted deal blocks, for the D.C. Mr. R. C. Graves, Clerk and Solicitor of the Council, Solicitor's Department, Town Hall.

DECEMBER 18.—**Hull.**—STORES.—For supply of builders' materials, &c., for the Corporation. Mr. H. Bell, City Electrical Engineers, Sculcoates.

DECEMBER 18.—**London, E. 1.**—SUPPLY OF GOODS AND VARIOUS WORKS.—Tenders for contracts for twelve months from April 1, 1925, except last two contracts, which are for the period from April 1, 1925, to September 30, 1925, for the Metropolitan Borough of Stepney. Items 1 to 23, Mr. Bernard J. Belsher, Borough Engineer and Surveyor, Municipal Offices, Raine-street, Old Gravel-lane, E. 1; deposit, £1 Treasury Note in respect of each tender. Items 24 to 32, Mr. V. B. Bateson, Town Clerk, Municipal Offices, Raine-street, Old Gravel-lane, E. 1; deposit, £1 Treasury Note in respect of each tender.

DECEMBER 18.—**Marlborough.** — LIMESTONE. — For 3,300 tons of Mendip limestone, 2 in. by 3 in. gauge. Mr. E. LL. Gwillim, Clerk, Silverless-street.

DECEMBER 29.—**Reading.**—SAND.—For supply of broken road material, gravel and sand, for the Berkshire C.C. Surveyor's Department, Shire Hall, The Forbury.

✱DECEMBER 31. — **London, S.W.17.** — PORTLAND CEMENT.—Supply and delivery of about 175 tons Portland cement of English manufacutre, at Tooting Bec Hospital extensions, Church-lane, Tooting, S.W.17. for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4.

NO DATE.—**Thurnscoe.**—MATERIALS.—For supply of pitching stone, kerbs, flags and sanitary pipes, for the U.D.C. Mr. J. Ledger Hawksworth, Clerk of the Council, Council Offices, Bolton-upon-Dearne.

ENGINEERING, IRON AND STEEL.

DECEMBER 13.—**Near Penrith.**—BRIDGE.—For construction in ferro-concrete of a new bridge across the Dacre Beck in Dalemain Park, on the Penrith to Ullswater-road, about 3 miles from Penrith Station, for the Cumberland C.C. Mr. G. O. Lockwood, County Surveyor and Bridgemaster, The Courts, Carlisle. Deposit £2.

DECEMBER 15.—**Belfast.**—STEEL FRAMEWORK.—For steel framework for internal office building, for the Corporation. Mr. R. Meyer, Town Clerk. Deposit £2 2s.

DECEMBER 15.—**Rotherham.**—RESERVOIR.—For construction of a ferro-concrete reservoir, for the C.B. Mr. C. L. Des Forges, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 15.—**Shrewsbury.**—MASONRY.—For erection of masonry bridges for the reconstruction of the English Bridge, for the T.C. Mr. R. F. Prideaux, Town Clerk, Guildhall. Deposit £10.

DECEMBER 15.—**Torquay.**—RESERVOIR.—For completion of a service reservoir and ancillary works at Great Hill, for the T.C. Mr. S. C. Chapman, Waterworks Engineer, Town Hall. Deposit £2 2s.

DECEMBER 16.—**London.**—STEEL.—For supply of about 547 tons of steel girders and other iron and steel work, for the G.W.R. Mr. A. E. Bolter, Secretary, Paddington Station.

DECEMBER 20.—**Dewsbury.**—TANKS.—For construction of percolating filters, humus tanks and other appurtenant works in connection with the construction of sewage disposal works at Mitchell Laithes, for the C.B. Mr. H. Booth, Town Clerk, Town Hall. Deposit £2 2s.

DECEMBER 20.—**Egypt.**—RESERVOIR.—For construction of a steel reservoir, for the Ministry of the Interior. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

DECEMBER 20.—**Southampton.**—STORES.—For erection of a steel framed electrical stores building on a piled foundation to the Western Esplanade, for the C.B. Mr. R. R. Linthorne, Town Clerk. Deposit £3 3s.

DECEMBER 20.—**Wilmslow.**—ADDITIONS.—For construction of screen chamber, suction wells, settling tanks, percolating filters and humus tanks, sundry lengths of pipeline and sundry auxiliary works, at the Southern Sewage Farm, for the U.D.C. Mr. H. Cliffe, Clerk to the Council, Clerk's Office. Deposit £5.

DECEMBER 22.—**Manchester.**—SHEDS.—For construction and completion of two five-story transit sheds, extension of the grain subway, and all anciliary works, at Manchester Docks, for the Ship Canal Co. Mr. F. A. Eyre, Secretary, 41, Spring-gardens. Deposit £10.

DECEMBER 22. — **Rhondda.** — STEELWORK. — For (*a*) Construction and delivery to Treherbert Station (G.W.R.) of about 160 tons of bridge steelwork; (*b*) and supply of bricks, stoneware pipes, pavings, kerbs, channels and pitchings, Portland cement and hydraulic lime, paints, oils, &c., for the U.D.C. Mr. E. Taylor, Engineer and Surveyor, Council Offices, Pentre, Rhondda.

DECEMBER 23.—**Merthyr Tydfil.**—STEEL.—For supply of about 5,000 tons of steel socket and spigot pipes of diameters ranging from 37 in. to 17 in., together with certain cast-iron pipes, valves and specials, all of British material and manufacture, for the Taf Fechan Water Supply Board. Mr. J. Colenso Jones, Clerk to the Board, Board's Offices, 101, High-street. Deposit £5.

DECEMBER 24.—**Marazion.**—For a new exit and fire escape at St. Thomas' Hall, for the Town Trustees. Architect, 11, Morrab-road, Penzance.

DECEMBER 31.—Hamilton.—BRIDGE.—Erection of Clyde Bridge, Hamilton, for the Joint Committee of the County Council of the County of Lanark, Town Council of the Burgh of Hamilton, and Town Council of the Burgh of Motherwell and Wishaw. Messrs. Formans & M'Call, C.E., 160, Hope-street, Glasgow. Deposit £1 1s.

JANUARY 5, 1925. — **Eastbourne.** — FLAPS. — For removal of existing tidal flaps, &c., in the valve chamber, Langney Point, and the supply and fixing of new tidal and sluice valves, for the C.B. Mr. L. Roseveare, Borough Engineer, Town Hall. Deposit £1 1s.

ROAD, SANITARY, AND WATER WORKS.

DECEMBER 13.—**Chester.**—ROADS.—For roads and sewerage works, for the City and County. Mr. J. H. Dickson, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 15.—**Baildon.**—SEWER.—For work in connection with the proposed construction of the 12 in. pipe sewer of an approximate length of 240 lin. yds., together with the necessary manholes, &c., for the U.D.C. Mr. R. Howard Moore, Clerk of the Council, Baildon. Deposit £1 1s.

DECEMBER 15.—**Cannock.**—STREETS.—For making-up of Lyndhurst-road, Heath Hayes, for the U.D.C. Mr. R. Blanchard, Engineer and Surveyor, Council Offices.

DECEMBER 15.—**Chepstow.**—WIDENING.—For widening St. Lawrence-road from Newport-road to Tintern road, Chepstow, for the U.D.C. Mr. Fothergill Evans, Clerk to the Council, Chepstow. Deposit £2 2s.

DECEMBER 15.—**Hayfield.**—PIPES.—For providing and laying about 7½ miles of 6 in., 5 in., 4 in., and 3 in. cast-iron pipes, with all necessary valves, hydrants and apparatus, and also for constructing two mass concrete tanks at Hayfield and Mellor, for the R.D.C. Mr. J. R. Bowden, Clerk to the Council, Council Offices, High-street, New Mills, via Stockport. Deposit £5 5s.

DECEMBER 15.—**Hemel Hempstead.**—DRAIN.—For laying about 1,200 yds. of 9 in. drain with manholes at Apsley-end, for the Hertfordshire C.C. Mr. A. E. Prescott, County Surveyor's Office, Hatfield, Herts.

DECEMBER 15.—**Penarth.**—SEWERS.—For construction of street sewers, &c., at Cornerswall, Penarth, for Messrs. Mountjoy, Ltd. Mr. E. W. Corbett, 3, Castle-street, Cardiff.

DECEMBER 15.—**Sleights.**—MAINS.—For providing, carting and laying of 1,760 lin. yds. of 8 in. cast-iron water mains and valves, for the Whitby Waterworks Co. Mr. J. Taylor, Secretary and Manager, Whitby Waterworks Co., 55, Baxtergate, Whitby. Deposit £2 2s.

DECEMBER 16.—**Birkenhead.**—SEWER.—For construction of a supplementary sewer in Borough-road, comprising about 700 lin. yds. of reinforced concrete sewer formed with 24 in., 27 in., and 30 in. diameter pipes, together with all manholes, gullies, &c., for the C.B. Mr. E. W. Tame, Town Clerk, Town Hall, Birkenhead. Deposit £3 3s.

DECEMBER 16. — **Devon.** — ROAD. — For work required in the reconstruction of approximately 4½ miles of the Exeter-Plymouth-road, for the C.C. Mr. Brian S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 16. — **Normanton.** — WIDENING. — For widening and improvement of Pontefract-road, for the U.D.C. Mr. J. W. Martin, Clerk, Council Offices.

DECEMBER 17.—**Birmingham.**—ROADS.—For reconstruction of Billesley-lane, between Oxford-road and Wake Green-road; reconstruction of Rotton Park-road, between City-road and Dudley-road; and widening of Island-road, Handsworth. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 17.—**Cullercoats.**—SEWER.—For construction of a concrete pipe main sewer with manholes, storm water overflow chamber, &c., complete, on the Cullercoats Boundary, for the Tynemouth C.B. and Whitley and Monkseaton U.D.C. Mr. A. Barker, Clerk to the Council, Council Offices, Whitley Bay. Deposit £2 2s.

DECEMBER 17.—**Dollar.**—FILTERS.—For construction of slow sand filters, clear water reservoirs, and other relative works, for the T.C. Mr. A. M. J. Graham, Town Clerk, Burgh Chambers. Deposit £2.

DECEMBER 17.—**Glamorgan.**—ROAD.—For construction of a new road from Nantymoel towards Cwmpare Rhondda Valley. Mr. T. Mansel Franklen, Clerk of the County Council, County Hall, Cardiff.

DECEMBER 17.—**Pass of Melfort.**—ROAD.—For construction of a new roadway, about 1½ miles in length, at the Pass of Melfort, for the Argyll C.C. Mr. W. Macdonald, District Road Surveyor, Columba Buildings, Oban. Deposit £2.

DECEMBER 17. — **Rotherham.** — FOOTPATH. — For materials required in the construction of a footpath, for the R.D.C. Mr. C. O. Rawstron, Engineer and Surveyor, Council Offices, Grove-road, Moorgate. Deposit £1 1s.

DECEMBER 17.—**South Mimms.**—SEWER.—For about 350 yds. of 9 in. stoneware pipe sewer, with manholes, &c., in Mutton-lane. Potters Bar, for the R.D.C. Mr. H. W. Poole, Clerk to the Council, 93, High-street, Barnet.

DECEMBER 17.—**Wembley.**—SEWERS.—For construction of about 430 lin. yds. of 12 in. and 9 in. sewers with branch drains, &c., for the U.D.C. Mr. C. R. W. Chapman, Engineer and Surveyor, Council Offices. Deposit £2 2s.

DECEMBER 18.—**Manchester.**—PAVING.—For repaving (with granite setts on a concrete foundation) Ashton Old-road, Openshaw, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall. Deposit £1 1s.

DECEMBER 18.—**Penybont District (Glam).**—ROAD WIDENINGS.—For carrying out, for the R.D.C. (1) Widening of the road near the new schools at Cwmfelyn; (2) the widening of the road near Pontrhydycyff schools, Llangynwyd; (3) widening of road, including the widening of a stone arch culvert, near Somerset Inn, Aberkenfig. Mr. E. Jenkins, surveyor, 83, Nolton-street, Bridgend. Deposit £2 2s.

DECEMBER 18.—**Plymouth.**—SEWER.—For construction of about 360 yds. of stoneware pipe sewers, together with manholes and other incidental works, in Wellington-street, Waterloo-street, and Trafalgar-road, Devonport, for the C.B. Mr. J. Wibberley, Borough Engineer and Surveyor, Municipal Buildings.

DECEMBER 18.—**Roxburgh.**—For track cutting, the supply and laying of approximately 2,600 yds. of 6 in. and 2½ in. water main and the erection of a service tank, for the Jedburgh District Committee. Mr. C. W. Anderson, District Clerk, Jedburgh.

DECEMBER 19.—**Manchester.**—PAVING.—For supply and laying of granited rock asphalt paving in Platt-lane, Rusholme, for the T.C. Mr. P. M. Heath, Town Clerk, Town Hall.

DECEMBER 19.—**Wood Green.**—CULVERTS.—For construction of about 724 yds. of reinforced concrete culvert and about 437 yds. of 42 in., 27 yds. of 36 in., and 70 yds. of 30 in. diameter granite concrete tube culvert, with the necessary inspection shafts and tumbling bays constructed to special details in reinforced concrete, for the U.D.C. Mr. C. Eric Staddon, Clerk of the Council, Town Hall, Wood Green, N. 22. Deposit £1 1s.

DECEMBER 20.—**Ilford.**—PAVING.—For levelling, paving, metalling, channelling, and making good The Crescent, Ilford, for the U.D.C. Mr. Adam Partington, Clerk of the Council, Town Hall.

DECEMBER 20.—**Rugby.**—ROADS.—For construction, sewering, levelling, &c., of certain roads, proposed to be made in connection with the housing scheme, Eastlands Estate, Clifton-road, for the U.D.C. Mr. J. H. Sharp, Engineer and Surveyor, Surveyor's Office, Benn Buildings. Deposit £1 1s.

DECEMBER 20.—**Stafford.**—SEWER.—For construction of two concrete storm water culverts, and the raising and metalling of the approach road to the sewage farm, for the C.B. Mr. H. H. Battle, Town Clerk, Borough Hall. Deposit £1 1s.

DECEMBER 22.—**Birmingham.**—PAVING.—For reconstruction of slag foundation, Cliveland-street; reconstruction of carriageway, Brougham-street, Augustus-road, and Westbourne-road; constructing concrete foundation to carriageway, Newhall-street; and reconstruction of new road, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor, The Council House. Deposit £2 each.

DECEMBER 23.—**Devon.**—ROAD.—For work required in the reconstruction and widening of the Whipton–Pinhoe section of the Exeter–Taunton road, for the C.C. Mr. B. S. Miller, Clerk of the Council, The Castle, Exeter. Deposit £10 10s.

DECEMBER 23.—**Dover.**—DRAINAGE.—For drainage scheme, comprising about 400 lin. yds. of 12 in., 2,000 lin. yds. of 9 in., and 700 lin. yds. of 6 in. stoneware pipe, together with all manholes, house connections &c., for the Corporation. Mr. Wm. Boulton Smith, Borough Engineer, Borough Engineer's Office, Maison Dieu House. Deposit £2 2s.

DECEMBER 31.—**Cowbridge.**—MAINS.—For a covered service reservoir in mass concrete, and 18,900 lin. yds. of various cast-iron mains, for the Mid-Glamorgan Water Board. Messrs. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s.

DECEMBER 31.—**Totnes.**—ROADS.—For making up Jubilee-road, for the C.B. Mr. Geo. E. Windeatt, Town Clerk, Town Clerk's Office. Deposit £2 2s.

JANUARY 5, 1925.—**Margate.**—PIPES.—For supplying pipes, excavating for and constructing about 999 yds. of 48 in. by 32 in. egg-shaped intercepting sewer, for the C.B. Mr. E. Brooke, Town Clerk, Town Clerk's Office.

JANUARY 12.—**Caerphilly (near).**—SEWER CONNECTION.—Constructing a sewer connection at Gwaunabara, near Caerphilly, of approximately 280 lin. yds of 18 in. and 24 in. stoneware and cast-iron sewer, with manholes, for the Caerphilly U.D.C. Mr. T. H. Richards, Surveyor, Council Offices, Caerphilly. Deposit £2 2s.

Competitions.

(*See Competition News, page* 926.)

Auction Sales, Tenders, etc.

DECEMBER 16.—**London, S.E.12.**—Mr. C. E. Clark will sell, without reserve, at Cooper's-lane, Grove Park, S.E.12, prime new timber. Auctioneers, Beddington House, Beddington, near Croydon.

DECEMBER 16.—**London, W.**—Mr. Richard J. Steel will sell, at Walmer Gardens, Midhurst-road, Ealing, W., the whole of the woodworking machinery and plant of a large variety. Auctioneer, 2, Plough-terrace, South Ealing, W.5.

✱DECEMBER 18.—**London, N.W.**—Messrs. J. T. Skelding & Co. will sell, without reserve, upon the Works premises of Messrs. Alexander Tompson & Co. (London), Ltd., by their kind permission, at the Goods Depot, L.M. & S. Railway (adjoining the Passenger Station), Cricklewood, N.W., *re* S. M. MacGuire & Co., in Bankruptcy, by order of the Trustee (E. H. Hawkins, Esq., F.S.A.A.), the nearly new, valuable tar macadam manufacturing plant and machinery, materials and effects. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

✱DECEMBER 22.—**London, S.W.**—Mr. Richard J. Steel has received instructions from Messrs. Demolition & Excavation (Greenham), Ltd., to sell upon the premises, Rosebank Wharf, Fulham, S.W., in 500 lots of sound building materials of various kinds. Auctioneer, 2, Plough-terrace, South Ealing, W.5.

✱DECEMBER 22.—**Shepherds Bush.**—Messrs. Charles R. Davis & Co. will sell, by order of the Liquidator, *re* The Standard Timber Trading Co., Ltd. (in voluntary liquidation), stock of timber, plant and office furniture, at the timber yard, at Wood-lane. Auctioneers, 285, Borough High-street, S.E.

✱DECEMBER 30.—**Barnet, Herts.**—Messrs. Charles R. Davis & Co., will sell, by order of the Receiver for the Debenture Holder, *re* McCormick & Sons, Ltd., woodworking machinery, motive power, builders' and contractors' plant, timber, &c., at the yard and mill, Bath-place, High-street, at 11 o'clock. Auctioneers, 285, Borough High-street, S.E.

JANUARY 14, 1925.—**London, E.**—Messrs. J. T. Skelding & Co., without reserve, owing to expiration of lease, at the Building Material Depot, Tredegar-square, Mile End-road, E., timber and building materials, including 200 tons of old oak beams and scantlings, R.S. joists, steam pipe and fittings, slates, scaffolding, trailer, vans, timber and corrugated iron sheets, &c. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

Public Appointments.

DECEMBER 13.—**London, N.9.**—Temporary General Foreman required by the Edmonton Urban District Council for the erection of 82 houses, the estimated cost of which is £50,000. Mr. Cuthbert Brown, M.B.E., M.Inst.C.E., Engineer and Surveyor, Town Hall, Edmonton, London, N.9.

✱DECEMBER 15.—**Coventry.**—Town Planning Assistant, Outside Engineering Assistant, Roads and Works Assistant, Two Building Inspectors and Building Clerk of Works required by the Coventry City Council, for the City Engineer's Department. Mr. Frederick Smith, Town Clerk, The Council House, Coventry.

DECEMBER 15.—**Durham.**—Two Assistant Architects and one Assistant Quantity Surveyor required by the County of Durham Education Committee. Director of Education, Shire Hall, Durham, enclosing stamped addressed foolscap envelope.

DECEMBER 15.—**London, W.1.**—Full-time Lecturer required (qualified Surveyor) at the Polytechnic, Regent-street, W.1, School of Architecture, Building and Surveying. Director of Education.

✱DECEMBER 16.—**Hertford.**—Temporary Clerk of Works required to supervise, under the direction of the Borough Surveyor, the construction of the Corporation's Housing Scheme and other works, for the Borough of Hertford. Mr. S. M. Senior, Borough Surveyor and Engineer, Borough Surveyor's Office, Hertford.

✱DECEMBER 22.—**Barrow-in-Furness.**—Temporary Architectural Assistant, with experience in the design of public elementary schools, required in the Borough Engineer's Department, for the County Borough of Barrow-in-Furness. Borough Engineer, Town Hall, Barrow-in-Furness, endorsed "Temporary Assistant."

✱DECEMBER 22.—**Ramsgate.**—Town Planning Assistant required in the Borough Engineer's Department by the Borough Council of Ramsgate, for town-planning scheme. Borough Engineer, Town Hall, Ramsgate.

✱DECEMBER 27.—**Enfield.**—Clerk of Works required by the U.D.C. Mr. H. R. Crabb, Surveyor, Public Offices, Enfield, Middlesex.

JANUARY 1, 1925.—**Cambridge.**—Assistant to the Master required by the Board of Architectural Studies at the University of Cambridge, School of Architecture. The Secretary of the Board of Architectural Studies, Mr. Edward Bullough, Gonville and Caius College, Cambridge.

✱NO DATE.—**Hong Kong.**—Overseer required by the Government of Hong Kong, for the Public Works Department, for three years' service, with possible permanency. Crown Agents for the Colonies, 4, Millbank, Westminster, London, S.W.1, quoting "M/13281."

PROPOSED NEW BUILDINGS & OTHER WORKS*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; and B.E. for Board of Education.

ABERDEEN.—A large central bacon factory for Aberdeenshire is to be erected in Aberdeen by a company called the Aberdeenshire Bacon Curing Factory, Ltd., with offices at 14, Bon Accord-street, Aberdeen. The scheme is estimated to cost about £30,000. The architect is Mr. J. Wendelbo-Madsen, of Richmond, Surrey.—The T.C. passed plans: House, Craigie-park, for Mr. Frank Nicol, per Mr. George Watt, architect; house, Hammerfield-avenue, for Whyte & Connon, per Messrs. Sutherland & George, architects; bungalow, Oakhill-road, for Mr. W. G. F. Booth, per Mr. Roy Meldrum, architect; bungalow, Westburn-drive extension, for J. Bisset & Sons, Ltd., per Mr. William E. Gauld, architect; two bungalows, Westburn-drive extension, for Mr. J. H. Walker and Miss E. Walker, per Messrs. Sutherland & George, architects; bungalow, Westburn-drive extension, for Messrs. Williamson & Bell architects; bungalow, Broomhill-road, for Mr. J. Chalmers, per Mr. T. S. Sutherland, architect; two houses, Gray-street, for Mr. J. Duncan, per Messrs. J. & J. Cameron architects; bungalow, Norfolk-road, for Mr. A. Shivas, per Mr. T. S. Sutherland, architect; two houses, Deemount-road, for the Northern Garden Suburbs, Ltd., per Messrs. D. & J. R. M'Millan, architects; three houses, Burns-road, for Mr. D. R. Allan, Mr. R. Cumming, and Mr. H. Ogilvie, per Mr. Arthur C. Bruce, architect; six bungalows, Burns-road, for Mr. A. Brown, Mr. A. Mutch, Mr. J. Addison, Mr. A. Silver, Mr. G. Cassie, and Mr. A. Thow, per Mr. A. C. Bruce, architect; bungalow, Craigshaw-road, for Mrs. E. W. S. Perfect; bungalow, Ellon-road, near Bridge of Don, for Miss E. M. Lamont, per Messrs. Tawse & Allan, architects; house, Ellon-road, near Bridge of Don, for Miss A. G. Mitchell, per Mr. G. Watt, architect.

ABERYSTWYTH.—The R.D.C. is to erect a new bridge at Llaneuaddau.

ACCRINGTON.—The M.H. has sanctioned the Council's proposed scheme for the erection of bungalows.

ALNWICK.—The Governors of Alnwick Infirmary have decided to enlarge the present accommodation at the Infirmary by the addition of a new wing on the south side, at an estimated cost of £1,600.

ALVERSTOKE.—The B.G. has informed the clerk to invite tenders for lavatory accommodation at the female infirmary. Application is to be made to the M.H. for sanction to loan of £2,000 for the building.

BANBURY.—Work has just started on the erection of a new auction mart.

BARNOLDSWICK.—A new secondary and technical school has been favourably considered by the West Riding County Council authorities.

BEDLINGTON.—The U.D.C. are seeking sanction from the M.H. for the carrying out of a proposed housing scheme for the erection of 76 houses at Sleekburn, at an estimated inclusive cost of £34,200.

BELFAST.—An important building scheme is now being planned for the erection of a large hotel in Donegall-square East, on a vacant site there. An expenditure of £250,000 is involved, and the proposed building will give accommodation for 250 bedrooms (most of which will have bathrooms attached), with the usual complement of public rooms, including a ball-room, dining rooms, grill rooms, and reception rooms. The hotel will be elaborately equipped and furnished. Electric lighting and heating from a central boiler house will be installed; and also telephones, bell systems, &c. There will be eight stories. The building will be fronted with local stone. The architect is Sir Brumwell Thomas, of "The Albany," Piccadilly, London, W.1., who designed the Belfast Linen Hall some thirty years ago. The site of the old Model school in Divis-street has been acquired for the R.C. Church, and it is proposed to erect new schools, at an estimated cost of about £12,000.

BIRKENHEAD.—Plans approved:—Laying-out a street proposed to be called Lingdale-avenue, between Ashburton-avenue and Lingdale-road; pair of semi-detached houses, Tollemache-road; boiler-house, Grange-road; three pairs of semi-detached houses, Lingdale-avenue; pair of semi-detached houses, Lorne-road.

BIRMINGHAM.—The waterworks engineer has been instructed to proceed with the arrangements for the placing of a contract for the construction of the proposed new Bartley reservoir.

BLACKBURN.—The R.D.C. has made application for sanction of a scheme for erection of 20 subsidy houses.—The T.C. are to seek sanction for the erection of 240 houses in addition to the 343 at present in course of erection.—An extension at the sanatorium for the B.G. has been approved, provision is made for an additional 25 beds, estimated to cost £4,000. Plans by Mr. W. Stirrup.

BLACKPOOL.—The Building Plans Committee has approved plans for the erection of 315 houses. Amongst the plans submitted was one for a batch of 82 houses at Marton.

BOLTON.—Messrs. Bradshaw, Gass & Hope, architects, Silverwell-street, Bolton, have submitted to the Council alternative plans for the £1,000,000 scheme for extension and improvement to the Town Hall.—The T.C. passed plans:—Deane Congregational Church, vestry, Wigan-road; C. W. Norris, two houses, Withins-lane; J. Horrocks, for two bungalows, Montserratt, Chorley Old-road; W. Draper eight houses, Hughes-street; W. E. Yates, 12 houses' Kirkby-road; Tramways Committee, 'bus station, Salop-street; Jos. Uttley, eight houses, Devonshire-road; N. O. Halliwell, four houses, Church-road; Electricity Committee, two transformer kiosks, Junction-road and Deane-road; R. H. Ainsworth, for amended layout plan, Bennetts-lane.

BRIGHTON.—It is expected that arrangements will shortly be made for the placing of the contract for the completion of the new church in Dyke-road. The architect is Mr. E. P. Warren, F.R.I.B.A., of 20, Bedford-square, London, W.C.

BRISTOL.—The Cadeva Cafes, Ltd., have bought a large block of property in Queen's-road, Clifton, for erection of a large modern restaurant. The architect is Mr. W. J. Stenner, A.R.I.B.A.

BURNLEY.—A new Employment Exchange is to be erected on vacant land in Hammerton-street.

BURY.—The T.C. passed plans for three houses in Blomfield-street.

CANTERBURY.—The Chislet Collieries, Ltd., of London, are carrying out a housing scheme at their colliery at Sturry, near Canterbury. The architect is Mr. G. J. Skipper, of 7, London-road, Norwich.

CARMARTHENSHIRE.—The Llandilo Fawr and Llanybyther R.D.C.s have decided to jointly erect a new bridge at Rhydcwmere.—The Llanelly B.C. is to erect 50 houses on the Llanerch site. The Council has been presented with a building site, and will proceed with the erection of a maternity home.

CHATHAM.—Messrs. Lloyds Bank, Ltd., are shortly to put in hand alterations, involving the provision of additional accommodation at their branch premises in High-street. Plans have been prepared by Mr. F. H. Shaun, architect to the company, at 71, Lombard-street, London, E.C.3.

CHELMSFORD.—The General Purposes Committee of the Essex C.C. are to consider the question of providing new office accommodation on the Duke-street site. The County Architect is to prepare plans.

CHELTENHAM SPA.—The County Council agreed to the purchase of a site for a new domestic science school.

CHERTSEY.—The U.D.C. are to erect 40 houses.

CLEVELAND.—The Cleveland Miners' Association is to erect a number of additional homes for aged workers in the industry.

CLEVELEYS.—Plans passed by the Thornton Council: House, Victoria-road, for Messrs. Handley & Scholes; two bungalows in Henley-street, for Mr. A. F. Gillett; two houses, Henley-avenue, for Mr. T. Barnes; three shops and houses in Nutter-road, for Mr. J. Eyres; house and shop in Queen's-road, for Mr. A. Banks; five pairs of villas in Devonshire-avenue, for Mr. T. Smith; five houses, Cleveleys-avenue and Alexandra-avenue, for Messrs. J. Cryer & Sons; and three houses and shops, Victoria-road, for Mr. W. Eastwood.

CLITHEROE.—The M.H. has approved of a Council scheme for the proposed erection of an additional 38 houses on the Henthorne estate. Sanction for the borrowing of £16,500 with which to carry out the scheme is being sought by the Council.—The Swan Brewery Co., Ltd., of Blackburn, propose to erect a block of shops in Castle-street.

COLCHESTER.—The old School of Art is being converted into a public hall.

CROMPTON.—The D.C. propose the erection of 24 houses on sites in Salt-street and Avis-street, Shaw.

DARLINGTON.—Plans passed by the T.C.: Two houses, Geneva-road, two houses, Longfield-road, four houses, Pierremont-gardens, for J. E. Chilton; house, Cleveland-avenue, 18 houses, Brinkburn-road, for the L.N.E. Railway; 12 houses, new road between Banklands-road and Cedar-road, for Bussey & Armstrong.

DARWEN.—Plans have been approved for the erection of 10 houses of which eight are for the Industrial Co-operative Society.

DEAL AND WALMER.—The scheme for opening up the sea front is being advanced by the demolition of houses in Beach-street and the extension of the pier parade.

DEWSBURY.—The T.C. passed plans: T. R. V. Parkin, house, Caledonian-road, Savile Town; A. Day, house, Leeds-road; Mr. Hodson, house, Tanhouse-street, Ravensthorpe.

DONCASTER.—The West Riding C.C. intimated to the R.D.C. of their intention to erect a new Council school at Askern Sutton-road.—It was recommended that the sites for the erection of houses at Edlington be purchased from the Edlington (Yorkshire) Land & Development Co., Ltd., for the sum of £1,300.—The clerk reported upon an interview with Mr. Shilfner with regard to the proposed plans for the erection of houses at Rossington, which are being prepared by the surveyor for consideration.

DUBLIN.—Plans passed by the City Architect: Shandon-road, off New-road, 17 houses, Mr. G. F. Byrne.

DUDLEY.—The T.C. has decided to erect 20 houses of steel construction upon a site in Trindle-road.

DUNFERMLINE.—The Fyffe C.C. has decided to place contracts for the erection of 100 houses, of which 60 are to be at Kelly and 40 at Crossgates.

DURHAM.—The City Council has resolved to take over the whole of the Whinney Hill building site, at a cost of £1,997 10s. In order to provide accommodation for residents displaced by the New Elvet improvement schemes, it has been decided to erect 120 houses on this site.

* See also our List of Contracts, Competitions, etc.

EASTLEIGH.—The D.C. are applying for the approval for subsidy in relation to the 58 houses to be erected, and that tenders be invited for their erection.

EDINBURGH.—The Dean of Guild Court approved plans for a new Lady Chapel, to be constructed, at an estimated cost of £2,000, in the interior of St. Patrick's Church, South Gray's Close, High-street; General Committee of the George-square Nursing Home for Women Trustees, steel house; Corporation, vertical retorts at Granton Gas Works; J. Ferguson, eight garages at 12, Horne-terrace; J. A. M'Lauchlan, two double bungalows at Traquair Park, Corstorphine; St. James's Episcopal Church Trustees, hall, &c., at Inverleith-row; T. J. Sampson, house at Boswall-road; F. B. Flood, houses at Claremont-road, Leith; W. Macdonald, house, hall, &c., at Royal Gymnasium Hall, Royal-crescent; Miss E. M. E. Todd and another, bungalow at Old Kirk-road, Corstorphine; W. J. Menzies, bungalow at new road, off Whitehouse-road, Cramond.

ELMSALL.—The Hemsworth R.D.C. has received official sanction from the M.H. for the erection of 166 houses at South Elmsall.

ELSECAR.—The Hoyland Nether U.D.C. are inviting tenders for the erection of fifty houses. Plans and specifications have been prepared by the Council's architect, Mr. J. R. Shepherd.

ETON.—Plans approved by the R.D.C.: House, Richings-park estate, Iver, for Mr. G. Thomerson; cottage, Iver, for Major E. Seymour; two bungalows, Farnham Royal for Mr. G. Mitchell; building, Farnham Royal, for the Peerless Trading Co.; bungalow, Burnham, for Mr. G. Gosheron; house, Langley, for Mr. T. A. King; bungalow, Wraysbury, for Mr. C. Joyner; bungalow, Stoke Poges, for Mrs. J. Stubbs; two houses, Farnham Royal, for Messrs. Turnbull & Sons; bungalow, Wraysbury, for Mrs. A. H. Ginn; bungalow, Iver, for Mr. E. Cotton; bungalow, Iver, for Mr. N. B. Ducker; house, Langley, for Mr. H. Street; 112 bungalows, Denham, for Messrs. Adams; bungalow, Langley, for Mr. C. P. Green; bungalow, Hitcham, for Mr. W. F. Haycock; house, Burnham, for Mr. J. E. Shuttleworth; house, Gerrards Cross, for Mr. T. W. Adams.

FAVERSHAM.—The Midland Bank, Ltd., have decided to erect a branch banking establishment in Faversham. The architects are Messrs. Whinney, Son & Austen Hall, of London.

FEATHERSTONE.—New buildings at Post Office Buildings for Messrs. Hill's trustees; house and shop at Halfpenny-lane, for Mr. Frank Greenwood; two houses at Purston, for Mr. Wood and Mrs. Bramley.

FOLKESTONE.—The General Purposes Committee adopted that tenders should be invited for the Marine Gardens Concert Hall. The Borough Engineer said the present estimate of the cost was £15,000.

FOREHOE.—The R.D.C. decided to employ Mr. Russell Bartram to draw out the plans for houses. The clerk was instructed to notify the Wymondham P.C. that sufficient land at the west end of the Browick site will be required for building purposes in the near future for the erection of 10 houses.—The Bridges Committee recommended the erection of a girder bridge at the Runhall Ford. The surveyor was instructed to get out detailed plans. The Council agreed that application be made to the Ministry for an approximate sum of £1,500.

GLAMORGAN.—The building programme decided upon by the County E.C. for the next financial year involves the erection of new schools and extensions of existing buildings, estimated to cost £785,370. In the Western Area of the County a new elementary school for 400 is proposed at Bridgend, the building cost being placed at £10,000. At Cadoxton extensions to provide for an additional 600 pupils will cost £13,000. At Clydach extensions and alterations, estimated at £3,000, and school at £10,000. At Dunvant a new department for 300, to cost £7,500. At Glyncorrwg the remodelling of an infant's school, at cost of £1,000; whilst at Glyn Neath a new department is estimated to cost £8,750. Additions to buildings at Gorseinon are estimated at £10,000. At Larleston a new department is estimated to cost £4,900, and a new department at Maesmarchog, £7,000. New accommodation at Pencoed is estimated to cost £6,520, and a similar amount is allocated to the provision of a new department at Pontlliw. A new elementary school for 350 scholars at Llangynwyd is estimated to cost £13,500, and extensions at Pontadulais are estimated at £7,000. A medical inspection room is to be erected at Tonmawr, and also additions to cost £1,000. A new school is to be built at Porthcawl, at an estimated cost of £10,000. In the Eastern Division new departments will cost £22,800. At Ffaldau remodelling of schools is estimated at £8,450, the sum including new domestic, science and handicraft centres. A new girls' department at Gwyndy (£14,500), a new boys' department at Hendre (£14,624), new departments at Llanharran (£18,000), addit ons at Llantrisant (£5,000), additions at Nantgarw (£6,600), remodelling of departments (£6,930), new departments for 400 children at Pantynawel (£10,200), new departments at Pwlicarn (£6,400), new school at Rhubina (£14,000), new school at Rhoose for 250 children (£8,250), extensions at Sully (£1,000), new departments at Tiryberth (£16,210), new school at Tre-Illtyd (£14,000), new department at Tymeinwr (£16,000), conversion of a building at Tymeinwr (£1,500), and a new department at Ystrad Mynach (£14,000), are also all included in the estimates and programme. The secondary education programme is as follows: New girls' school at Gowerton (£39,000), new boys' school at Neath (£43,000), new girls' school at Port Talbot (£39,000), and new secondary school at Pyle (£41,500). Additions to buildings of existing secondary schools that are scheduled are as follows: At Maesteg school (£10,500), at Pontardawe school (£4,000). New secondary schools in the Eastern Division will be erected at Caerphilly (£37,000), Pontyclun (£34,000), Tonyrefail (£32,900), and Ystrad Mynach (£37,000), whilst additions at Aberdare girls' secondary school will cost £1,500, a new laboratory at Bargoed school (£5,000), and at Ogmore and Garw schools (£2,625 each), are also to be provided. In the matter of engineering and mining education £25,000 is allocated to the erection of a new technical school at Barry, £8,750 for a metallurgical laboratory at Port Talbot, whilst £4,000 is ear-marked for the equipment of the latter. Mining and engineering laboratories at Gowerton, Neath and Bridgend will each cost £7,500, and one at Ystrad Mynach £7,950. A residential institute for the blind to be erected at Bridgend is expected to cost £35,000. The committee has applied already for a first portion loan of £65,000, approximately, in connection with the above detailed programme.

GLASGOW.—The Dean of Guild Court passed plans: Corporation Housing Department, bowling club-house, Tay-crescent, Cumbernauld-road, and a tennis pavilion and bowling green house at Mosspark housing scheme; Corporation Parks Department, bowling and tennis pavilion in Maryhill Park; Taylor & Wilson, eight terrace houses at Essex-drive, York-avenue, Jordanhill; Corporation Housing Department, house at Boulevard, Knightswood; James Finlay, 166, Buchanan-street, house, Mossgiel-road, Newlands.

GRAVESEND.—A new branch stores is to be built for the Gravesend and District Co-operative Stores, Ltd.

GREASBOROUGH.—The clerk of the Council has been instructed to invite tenders for the proposed new public hall.

GUILDFORD.—New branch premises are to be erected in North-street, for the West Surrey Central Dairy Co.—The T.C. has instructed the Borough Surveyor to submit for consideration alternative plans for the erection of flats on land at Grange-road and on the remaining land at Guildford Park.—Plans submitted:—Four houses, New Cross-road, Stoughton, for Mr. Hebburn; house, Clandon-road, for Mr. W. Astling; bunzalow, Onslow Village, for Mr. Perry; house, Deerbarn-road, for Mr. Goucher; house, New-road, off Nightingale-road, Guildford, for Messrs. Tribe & Robinson; pair of semi-detached bungalows, Grange-road, for Mr. Gaff; detached house and shop, for Hart & Co.; two detached houses, Weston-road, for Mr. E. Perdue; two semi-detached houses, Joseph's-road, for Mrs. A. Holford.

HAILSHAM.—R.D.C. approved plans: Two bungalows, Prinkle Farm, Bodle-street, for Mr. R. Keeley; house, Stocks Field, Ninfield Green, for Mrs. E. Gittens.

HALIFAX.—The Borough Surveyor has been instructed to invite tenders for the erection of 50 houses on the Nursery-lane site.

HARROGATE.—The Borough Surveyor has been instructed to prepare plans and estimates for the rebuilding of the Magnesia Well Pump Room, and the construction of a covered promenade.

HAVANT.—The R.D.C. propose the erection of 50 more houses.

HAY.—The R.D.C. is considering the erection of 18 or 20 houses.

HAYES.—A public market building is to be built on a large vacant site in Coldharbour-lane, to the design of Mr. D. Lewes, of Uxbridge.—The "Wagon and Horses" is to be rebuilt by the Isleworth Brewery Co.

HEBDEN BRIDGE.—The U.D.C. has decided to invite tenders for the erection of 12 houses at Eaves Bottom.

HORNSEA.—The U.D.C. are seeking borrowing powers for £7,500 for the purposes of providing bathing bungalows, retaining wall, lavatory accommodation, shelters, and the completion of the sea wall improvements.

HORSFORTH.—Plans passed:—Electricity sub-station in Featherbank-lane, for the Yorkshire Electric Power Co., Ltd.

HOUGHTON-LE-SPRING.—The U.D.C. has applied to the M.H. for permission to erect an additional 73 houses on the Hetton-road site, and to negotiate for a further site near on which the Council has an option, and where there is sufficient space for the erection of 150 to 200 houses.

KEIGHLEY.—The B.G. has approved plans for the extension of the Nurses' Home at St. John's Hospital at an estimated cost of £10,000.

KIDDERMINSTER.—Amongst other plans passed are new cabinet works and saw mill, Park-lane; and four houses.

LEADGATE.—The U.D.C. has resolved to make application to the M.H. for sanction for a loan of £13,500 for sewage works at Crookhall and Billingside.

LEEDS.—Messrs. Holt & Co., warehouseman, of East-parade, have purchased the adjoining property, and plans are now being prepared for the reconstruction work by Messrs. A. & F. Mosleys, architects, Leeds.—The T.C. passed plans: J. H. Howcroft, detached house, Silver Royd-grove and terrace, Wortley; W. C. Rodgers, two semi-detached houses, Talbot-grove, Roundhay; M. Harrison & Co., four semi-detached houses, York-road; John Coates & Sons, detached and two semi-detached houses, Ash-road and Canterbury-road, Headingley; E. R. Parker, bungalow, Roman-avenue, Roundhay; Mrs. M. L. Webb, detached house, Vancouver-place, Chapel Allerton Hall Estate; E. Fish, three houses, Roman-gardens, off Street-lane.

LEXDEN.—Application is to be made to the M.H. for sanction to borrow the sum of £3,200 for the erection of eight houses at Wormingford, Peldon, and Little Tey.

LEYTON.—The U.D.C. propose erecting 130 houses.

LITTLEBOROUGH.—The Council are to erect 20 houses.

LIVERPOOL.—A new R.C. school for the Sacred Heart Parish is to be erected to provide accommodation for 200 more infants and 100 junior girls. The estimated cost is £20,000.

LONDON.—Police dwellings are to be built on a Tower Bridge site.

LONDON (FINCHLEY).—A public library is now being suggested.

LONDON (HACKNEY).—The B.C. passed plans: D. Morris, 18 shops and flats, Stamford-hill and Clapton Common; Wratten & Godfrey, mission hall, Hackney-grove; Mr. C. K. Codrington, lock-up garages, corner of Oldhill-street and Lynmouth-road; Mr. S. Morris, shops and houses, corner of Mare-street and Devonshire-road.

LONDON (LAMBETH).—The B.C. passed plans:—Mr. W. Wallis, houses upon sites abutting on new streets leading out of Tulse Hill; Mr. Val Meyer, rebuilding of 16 to 24, Catherine-street; Andrew & Peascod, house, Baytree-road; A. G. Cole, building, No. 210, Denmark Hill; G. Spencer & Co., building, Norwood-road.

LONDON (LEWISHAM).—The hospital is to be enlarged by the addition of two new wards, power-house, operation department, and disinfecting station.

LONDON (STEPNEY).—The L.C.C. recommend the borrowing by the B.C. of £1,500 for the purpose of contributing towards the cost of a street widening.

LONDON (WESTMINSTER).—The City Council are to erect a public convenience in Rochester-row.

LONDON (WOOLWICH).—The B.C. passed plans: G. W. Keats, sub-station in yard, Town Hall, Wellington-street; H. Kent, ambulance station, Woolwich High-street; L. White, bungalow, Shrewsbury-lane and Dallin-road, Plumstead; W. Childs, house, Glenesk-road, Eltham; Thompson & Walford, Baptist church and school, corner of Griffin-road and Brewery-road, Plumstead; G. Downs, two houses, Park View-road, Eltham.

LUTON.—A fish market is being erected.

MIDDLETON.—Memorials are to be erected and improvements carried out at St. Peter's R.C. Church, estimated to cost £2,000.

MIDDLETON-IN-TEESDALE.—A scheme is being prepared for the provision of a parish hall.

NEWARK.—An electricity transformer station is to be erected upon a site in Pelham-street for the Derbyshire and Notts Electric Power Co., Ltd.

NEWCASTLE.—A new chapel is to be erected at West Moss, in the Brunswick Circuit, at an estimated cost of £2,988.—An extensive building programme, including the erection of a large number of concrete houses, has been decided upon by the Newcastle Corporation Housing Committee. In order to provide accommodation in Pilgrim-street, Liverpool-street, and Prudhoe-street, it was agreed to build 84 houses on Slater's Quarry, Barrack-road, and 467 dwellings on the Cowgate housing site. The houses in Slater's Quarry will be three story tenements, of three and four rooms each; and at Cowgate two and three-roomed flats, and three, four and five-roomed houses. The Committee also resolved to build 300 concrete houses on the High Heaton estate, and 150 on the Walker estate. These will be constructed on the Wright block system. The total number of houses embraced by this new programme is 1,069.—The T.C. agreed to spend £2,600 in improving the living quarters at the Red Barns and Scotswood-road Police Stations.—The Town Improvements Committee has approved plans for the erection of 27 self-contained houses in different parts of the city.

NEWMARKET.—The M.H. has approved the borrowing of £6,000 for the Stamford-street building scheme of 10 cottages, for the U.D.C.

NEWPORT (MON.).—The Watch Committee has approved sketch plans and a preliminary estimate for the proposed erection of ten flats or maisonettes at the rear of Maindee Police Station, for use as police quarters.

NEWRY.—The U.D.C. decided to consider making of arrangements for proceeding with the schemes for the erection of 42 houses in Chapel-street and six houses in High-street.

NORMANTON (YORKS.).—Plans passed: Twelve additional houses, Snydale-road, for U.D.C.; six houses, Dalefield-lane, for Mr. Banks.

NORTHAMPTON.—Plans passed by T.C.: House, Harlestone-road, for Mrs. M. A. Blacklee; house, Vicarage-lane, for Mr. Clarke; house, Crescent-road, Far Cotton, for Mrs. Abbott; two houses, Beech-avenue, for Mr. J. H. Welch; house, Christchurch-road, for Mr. J. M. Burman; four houses, Beech-avenue, for Mr. E. H. Tibbs.—The T.C. has approved a scheme for public baths, at a cost of £30,000.

NOTTINGHAM.—Subject to the approval of the M.H., the Corporation has agreed to purchase Aston Hall, for conversion into an asylum.

OLDHAM.—The T.C. has decided to make application to the M.H. for sanction to a loan of £22,956, for the erection of the Ward-street centre.—The Mayor decided to discuss the question of the provision of a public abattoir.—The Borough Surveyor submitted plans of proposed house and conveniences at Watersheddings Recreation ground, and also of shelter and conveniences in Alexandra Park.—The Committee also discussed the question of erecting a block at Westhulme Hospital for the treatment of ailing children, and the Medical Officer of Health has submitted plans for the erection of a building, at an approximate cost of between £4,000 and £5,000, which has been submitted to the M.H.—The T.C. passed plans: Dr. H. Gill, house, Lees-road and Frome-street; W. Makin, bungalow, Meadow-lane; I. Barber, six dwelling-houses, Rippondon-road, Moorside; Hawthorne and W. & H. Bloor, Ltd., nine houses, Langham-road.

ORSETT.—The M.H. are prepared to sanction reasonable expenditure on the provision of two new isolation wards at the hospital, provided the plans, specifications, and accepted estimates are submitted.

OXFORD.—The T.C. passed plans:—H. & G. Simonds, Ltd., boiler-house, Osney-lane; Rev. E. G. Burrough, vicarage house, Lonsdale-road; Miss Shepherd, house, Belbroughton-road; C. Wright, house, Belbroughton-road; University of Oxford, bio-chemistry laboratory in the Parks, at the rear of the University Museum, Parks-road.—A new school of pathology is being erected at the University, at a cost of about £150,000. The plans show a large building of stone on a steel framework, with fireproof floors, consisting of three stories and basement. Heating and electric lighting are to be installed. Work on the building, which will take about eighteen months to complete, has now begun. The contractors are Messrs. Wooldridge & Simpson, of Frenchay-road, Oxford. The architect is Mr. Edward P. Warren, F.R.I.B.A., of 20, Bedford-square, London, W.C. 1.—Messrs. Fox, Lane & Co., of Oxford, are to build new works and warehouses in St. Aldate-

street.—Additions are to be made to the Lady Margaret Hall, by the building of a block of premises at the east end of Norham-gardens, to be used as students' quarters.

PLYMOUTH.—A new sorting depot is to be built by the G.P.O., at a cost of £60,000.

PONTEFRACT.—Plans passed:—House at Hillcrest estate for Mr. E. Betteridge; house at Slutwell-lane, for Mr. A. Batte; house at Ferrybridge-road, for Mrs. Lodge; and house at Ferrybridge-road, for Mr. Thompson.—Plans passed by R.D.C.: House, Churchfields-lane, Glasshoughton, for Mr. S. Campy; bungalow, Carleton, for Dr. Chrispin; house and shop, Fryston-road, Airedale, for Mr. F. Harper; house, Park-avenue, Glasshoughton, for Mr. H. Robshaw; bungalow, Hass-lane, Cutsyke, for Mr. J. Sennett.

PONTYPRIDD.—The U.D.C. has applied for sanction to proceed immediately with the erection of 40 houses at Rhydfelan Ward, and sanction to erect a further 300 houses in the same Ward during the next two years.

PORT TALBOT.—The B.C. has received M.H. sanction to its proceeding with the erection of 100 houses.

PRESTON.—Extension to the Chestnuts Sanatorium, estimated to cost £10,000, is proposed by the T.C. The E.C. recommend the purchase of premises in Winckley-square as part of the Park School for the sum of £5,000. The E.C. are to apply for sanction to borrow £35,000 for extensions of mains and services in the district.

PYLE.—The Penybont (Glam.) R.D.C. is to reinvite tenders for the erection of houses, both parlour and non-parlour types, at Pyle and at Sarn.

QUORN.—The U.D.C. received plans for eight houses in Castledine-avenue, for Thompson & Gamble, and a house in Woodhouse-road.

RAMSGATE.—The Ramsgate Pier Co., Ltd., have in contemplation the rebuilding of their property. It is proposed to demolish the old pier and to erect a new one.

RAVENSTHORPE.—The B.E. has approved the purchase of a site at Myrtle-road for the erection of a proposed Council school.

RAWTENSTALL.—The D.C. propose to develop the Hall Carr and Longholme housing estates.

RHONDDA.—The U.D.C. has in consideration the provision of a mining institute.

RISHWORTH.—The Slithero bridge is to be widened and strengthened at a cost of £10,000.

ROCHESTER (KENT).—Alterations and additions are to be made to the Bartholomew's Hospital, and the Governors have requested Mr. Herbert Read, of Messrs. Read & MacDonald, of 16, Cork-street, London, W.1, to submit a suggested scheme.

ROTHERHAM.—The Education Committee has submitted proposals to the Board of Education, which includes for new schools at Thorpe Hesley (site and buildings, £12,500); new central school, Cranworth-road (building work, £28,000); purchase of land for extensions to the High School for Girls, estimated cost, £1,950; new class-rooms and laboratory, at Grammar School (buildings, £3,250).—A new technical college is also proposed, together with school of art buildings, at an estimated cost of £50,000, the estimated cost for provision of a school for mentally and physically defective children is £4,300 (site and buildings).

RUISLIP.—The Manor Cottage Society has obtained fresh tenders for houses proposed to be erected. The Society propose to proceed with 10 houses. A loan of £4,700 has been asked for.

RYTON.—The U.D.C. are to erect 30 houses on the Hexham Old-road site.

SEAHAM HARBOUR.—Plans passed by the U.D.C.: House, for J. Robinson; house, for H. W. Laws; house, for M. Irving; and groundsmen's house for Dawdon Recreation Committee.

SEDGEFIELD.—Plans passed by the R.D.C.: Bungalow, Darlington-lane, Ferryhill, Mr. J. Bell; bungalow, Darlington-road, Ferryhill, Mr. J. Walters.—The M.H. has sanctioned the erection of 80 houses, for the Council.

SOUTHAMPTON.—Work is to start shortly on the large scheme of extensions to the South-Western Hotel, at Southampton, owned by the Southern Railway Co. A new wing is to be erected to accommodate another 80 bed and bathrooms, together, on the ground floor, with the requisite dining and public reception rooms, lounges, &c. The new building will be carried out in brick, in conformity with the existing hotel, relieved by Portland stone dressings. Fireproof floors, staircases and landings will be provided. Central heating, electric lighting, hot water, bells and telephones, and other equipment will be installed. There will be three lifts and several goods and service hoists. This sanitary engineering work will form an important item, whilst several hundred tons of steel work will be involved in the construction work. Wood block flooring will be used in several of the principal apartments. The cost of the building and its equipment is estimated at £200,000. The general contractor is Mr. F. G. Minter, of Ferry Works, Putney, London, S.W.15. The designs have been prepared by Mr. J. R. Scott, architect to the Southern Railway Co.

SOUTHPORT.—Among the many building proposals of the National Provincial Bank, Ltd., is one for the provision of new branch offices at Lord-street, where a site has been purchased. The architects are Messrs. Finchett, Lancaster & Archer.

SOWERBY BRIDGE.—The Surveyor to the U.D.C. has prepared a scheme for the erection of 58 houses, spaced 18 to the acre.

SPENBOROUGH.—Plans passed: Institute at Halifax-road, Liversedge, for Liversedge Parish Church; two houses, Bradford-road, Oakenshaw, for Messrs. Gill & Howorth.

STOKE.—The U.D.C. has received a letter from the Stone R.D.C. asking for authority to support a resolution calling upon the County Council to widen the Trent Bridge at Walton.

STOKE-ON-TRENT.—The Housing Committee recommended the Council's acceptance of a tender amounting to £3,280 for the erection of six non-parlour houses in Jervis-street, Hanley, and a tender amounting to £3,750 for the erection of six parlour houses in Cowper-street, Fenton.

STOKESLEY.—Plans passed by the R.D.C.: Shop, Great Ayton, for J. Odgen; institute at Seamer.

STOURBRIDGE.—The T.C. propose erecting houses for which plans have been forwarded to the M.H. Plans passed:—Bungalow, Worcester-street, for Mrs. G. Butler; house in High Park-avenue, for Mrs. F. Gill.—A large new engine shed is to be erected at Stourbridge by the Great Western Railway Co. The building will be of brick and concrete, and will house a 65 ft. turntable already on the site. The shed will be 255 ft. long, 219 ft. wide, and will have a slated roof. From its centre will radiate about 28 tracks, each varying from 41 ft. to 100 ft.; a large lifting shop will be erected on the east of the main building, with accommodation for stores; on the other side will be mess rooms for mechanics, enginemen, &c., with kitchen and lavatory. A coal stage with an elevated roof will also be erected with a water tank above, with a capacity of 74,000 gallons. It is also proposed to provide coal-stacking grounds and outside engine pits; whilst the locomotive yard will be equipped with water supplies, cranes, &c. The total cost is estimated at £118,000. Plans have been prepared by Messrs. Lloyd & Waddell, chief joint engineers to the railway company.

STOURPORT.—A contract is shortly to be placed for the superstructure of the new electricity generating station for the Shropshire, Worcester and Staffordshire Electric Power Co., Ltd. Plans have been prepared by Mr. C. W. G. Little, chief engineer to the British Electrical Federation, and Mr. J. T. H. Legge, chief engineer to the Shropshire, Worcester & Staffordshire Company.

STRETFORD.—The U.D.C. passed plans:—Two houses, Wordsworth-road, for Smith & Allcock; four houses, Addison-road, for Mr. T. Pollock; 52 houses, Ravenswood-road, for Mr. G. A. Russell; six houses, Seymour-grove, for Mr. G. A. Russell.

STROOD (KENT).—A new market hall is proposed to be erected on a site in the High-street, to the plans of Mr. G. P. E. Bond, of Rochester.

SUTTON.—The U.D.C. passed plans: Two houses, Benhilton-gardens, for Dr. Bathurst; three houses, Clensham-lane, for Mr. W. G. Carse: house, Aultoneway, for Mr. W. White; bungalow, Aultone-way, for Mr. E. Harrop; house, Thicket-road, for Mr. L. J. Jackson.

TADCASTER.—Plans passed: Two houses, Station-road, Scholes, for Messrs. Stockdale & Robinson; two houses, Horner-avenue, Scholes, for Mr. Moss; houses, Milton-road, Scholes, for Messrs. Fryer & Fairburn; two houses, Owlett Hall-lane, for Messrs. Elliot & Revis; conversion of Grange Farm into three houses, for the Airedale Collieries, Ltd.—A site has been acquired at Allerton, Bywater, upon which it is proposed to carry out a housing scheme, comprising 120 houses (24 parlour type and 96 non-parlour type).—Another site, comprising 6.6 acres, is to be acquired at Micklefield, and a scheme for erection of 68 houses to be carried out there (18 parlour type and 50 non-parlour type).

TAUNTON.—New science buildings are being erected at the school as a war memorial, at a cost of about £12,000. The architect is Mr. E. Vincent Harris, of London.

TILBURY.—The Surveyor of the U.D.C. submitted and recommended for approval plans on behalf of the Governors of Tilbury Hospital of plans for new hospital accommodation.

TORQUAY.—The T.C. passed plans:—Two houses, Old Woods-hill, for Mr. J. Stoneman; house, Barrington-road, for Mr. S. Exall; house, Windsor-road, for Mr. W. Dart; six houses, St. George's-road, for Mr. Chas. Dear.—The Ministry of Health has given sanction to a harbour reconstruction scheme at Torquay, upon which the Corporation propose to expend some £17,000. Upon the construction of outer concrete walls, &c., at Beacon Quay £15,000 is to be spent; new reinforced concrete pitched decking is to be laid on Haldon Pier and South Pier, at a cost of £1,023 and £497, respectively, and a new concrete floor provided at the fish quay, at a cost of £450. Tenders for the work are to be invited at the earliest possible moment.—Funds are being raised for the erection of a large hospital at Torquay to serve the needs of the locality. A site has been selected, and plans have been prepared by Mr. H. Percy Adams, F.R.I.B.A., of 9, Knightsbridge, London, S.W.1

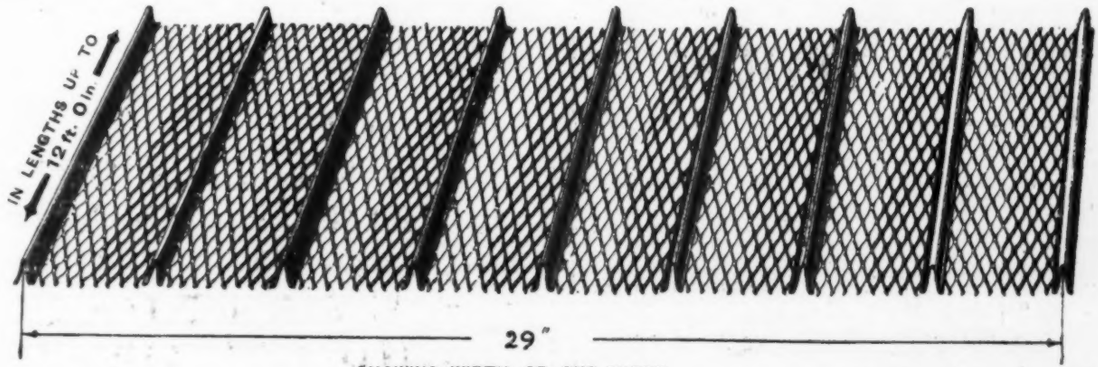
TYNEMOUTH.—The T.C. passed plans: Six houses Bamborough-terrace and Blanchland-terrace, by Messrs. F. R. N. Haswell & Son, for Messrs. Brannen Bros.; rebuilding of premises, 66 and 68, Bedford-street, by Mr. W. Stockdale, for Mr. R. Graham; two semi-detached houses, Hunt Hill estate, by Mr. W. Stockdale, for Messrs. Ball Bros.; police station, Albert Edward Dock, by Messrs. Marshall & Tweedy, for Tyne Improvement Commissioners; 13 self-contained houses, Lilburn-street, Chirton, by Mr. A. K. Tasker, for Mr. I. Smith; 15 self-contained houses, Lilburn-street, Chirton, by Mr. A. K. Tasker, for Mr. I. Smith.—The Public Library Committee has resolved to erect a new library with a reference department, and a separate children's library and reading room. — Plans prepared by the housing architect for 12 blocks, each containing four maisonnettes, have been provisionally approved. Plans passed: Six houses, Blanchland-terrace, Messrs. Brannen Bros.; two houses, Hunt Hill estate, Messrs. Ball Bros.; 15 houses, Lilburn-street, Mr. A. K. Tasker; 13 houses, Lilburn-street, Mr. I. Smith; police station, Albert Edward Dock, Tyne Improvement Commissioners.

WAKEFIELD.—Plans passed by City Council: Two houses, Many Gates-lane, for Messrs. G. S. Hepworth & A. Siswick (Messrs. Bell & Kay, architects); house and shop, Alverthorpe-road, for Mr. A. Blackburn; house, Bromley Mount, for Mr. J. A. Benton.

WATFORD.—An extensive development scheme is to be carried out at the Oxhey estate, where it is proposed to build about 100 houses. The architects and surveyors to the estate are Messrs. Fayers & Fayers, of Watford.

WILLESDEN.—A large site at Park Royal, Willesden, has been selected for the erection of the extensive Eurpean depot of the H. J. Heinz Co., the American canning firm. A considerable area has been acquired, and buildings are to be erected for both manufacturing and storage purposes. The first section of the plans show two blocks—one of two stories, and one of one story—with a floor area of about 140,000 and 70,000 ft. respectively. Elaborate machinery will be installed in the two-story building, of which a certain amount will be shipped from the United States. Steam and electricity will be used for power purposes. The buildings will be of brick with reinforced concrete floors. Both light roofs will be used, covered with patent glazing and asbestos tiles. The contractor is Mr. G. H. Burgess, of 45, Berners-street, London, W.1. The steel work will be supplied by Messrs. Archibald D. Dawnay & Sons, Ltd., of Battersea. The architects and consulting engineers are Messrs. Hal Williams & Co., of Factory House, 79, High Holborn, London, W.C.

WORTHING.—Plans passed by T.C.:—House, Littlehampton-road, for G. T. Short, by G. T. Short; five houses, Heene-road, for T. R. Dewell, by T. R. Dewell; house, Pembury-road, for F. J. Goodman, by J. E. Lund; two houses, Boundary-road, for A. Clare, by A. Clare; two shops and store, North-street, for C. Tomsett, by C. Tomsett; house, Mill-road, for E. M. Todd, by C. H. Huskinson; house, St. George's-road, for A. Jay, by H. V. Steer; house, Goring-road, for H. Thomas, by H. Sleeman & Co.; house, Forest-road, for D. Peacock, by H. Osborn; five houses, Grand-avenue, for S. W. Phillips & Co., by S. W. Phillips & Co.; six houses, Marine-parade, for D. S. Barclay; 36 houses St. Elmo-road, for H. P. Brazier, by E. J. Love; house, St. Thomas's-road, for J. A. Walker, by Smith, Bartlett & Co.; house, Mill-road, for G. Harwood, by J. E. Lund; house, Wallace-avenue, for H. Tier, by J. E. Lund; two houses, Grand-avenue, for J. Chadwick, by B. J. Blaker; house, Manor-road, for E. G. Goodall, by E. G. Goodall; house, Boundary-road, for H. P. Trounce, by Smith, Bartlett & Co.; house, Wallace-avenue, for Mrs. McLeod Roberson, by Smith, Bartlett & Co.; house, Wallace-avenue, for E. D. Cranmer, by J. E. Lund.



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2 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1½ in. to 2 in. ditto, ditto ..... "	1 4
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3 in. ditto. ditto "	2 10
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Cuba Mahogany	0 3 0	to	0 3	6	
Teak (Rangoon, Moulmein or Java), per ft. cube	0 14 0	to	—		
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20 by 10	25 12 6		

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Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/1½	11d.	3½d.
3½ in.	1/2½	1/0½	3½d.
4 in.	1/4	1/1½	3½d.
4½ in.	1/5½	1/4	4d.
5 in.	1/7½	1/5½	5d.

O.G. GUTTERS.

3 in.	1/6½	1/2½	3½d.
3½ in.	1/6½	1/2½	3½d.
4 in.	1/7½	1/4	3½d.
4½ in.	1/9½	1/6½	4d.
5 in.	2/1½	1/9	5d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/7½	1/1½	1/8
2½ in. "	1/9½	1/4	2/0½
3 in. "	2/1½	1/8	2/5½
3½ in. "	2/6½	1/11½	2/10½
4 in. "	2/11½	2/4½	3/5½

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6fts plain	3 0½	2 2½	2 8
2½ in. "	3 6½	2 5½	3 3½
3 in. "	4 2½	2 8	4 0½
3½ in. "	4 7	3 3½	4 8½
4 in. "	5 1	3 9½	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex works.

	Pipe.	Bends, stock angles.	Branches stock angles.
	s. d.	s. d.	s. d.
3in. per yd. in 9ft. lengths	4 9	5 8	8 10
4 in. "	6 3	6 8	11 4
5 in. "	7 6	11 6	18 2
6 in. "	8 10	14 4	23 5

Per ton in London.

IRON—	£ s. d.		£ s. d.
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	—	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 10 0	..	13 10 0
Hoop iron, basis price	16 10 0	..	17 10 0
" Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black— Ordinary sizes to 20 g...	14 10 0	..	15 10 0
" " 24 g...	15 10 0	..	16 10 0
" " 26 g.	17 10 0	..	18 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g....	21 0 0	..	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	22 10 0	..	23 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g...	24 10 0	..	26 10 0
Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	20 10 0	..	21 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	21 0 0	..	22 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	23 0 0	..	24 0 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6ft. by 2ft. to 3ft. to 20g. and thicker ..	23 10 0	..	24 10 0
Best Soft Steel Sheets, 22 g. and 24 g. ..	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3in. to 6 in. (under 3in. usual trade extras.)	20 10 0	..	22 0 0

METAL WINDOWS—Standard sizes suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1/4 to 1/7 per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.
LEAD—Sheet. English, 4 lb. and up	50 0 0
Pipe in coils	50 10 0
Soil Pipe	53 10 0
Compo pipe	56 10 0

NOTE—Country delivery, 30s. per ton extra ; lots under 3 cwt., 2s. per cwt. extra and over 3cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	£37 0 0	..	—
Do., ex country, carriage forward ..... per ton	£38 0 0	..	

COPPER.

	s. d
Seamless Copper tubes (basis) ..... per lb.	1 1½
Strong sheet ..... "	2 3
Thin " ..... "	2 4
Copper nails ..... "	2 3
Copper wire ..... "	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2in.
7/6	11/6	17/-	29/-	36/-	63/- per doz

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.P

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/.	126/- "

TIN—English Ingots, 2/6 per lb. SOLDER—Plumbers' 1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0	4 1
" " " in barrels	"	0	4 3
" " " in drums	"	0	4 6
Boiled " " in barrels	"	0	4 6
" " " in drums	"	0	4 9
Turpentine in barrels		0	5 2
" in drums (10 gall.) ..		0	5 5
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		59	0 0

GENUINE WHITE LEAD PAINT—

"Father Thames," "Nine Elms, "Park," "Supremus," "St. Paul's," "Spedol" and other best brands (in 14 lb. tins) not less than 5 cwt. lots	per ton delivered	81	5 0
Red Lead, Dry (packages extra)	per ton	52	10 0
Best Linseed Oil Putty	per cwt.	0	15 0
Filocol	per cwt.	0	15 6
Size, AD Quality	(ke	0	3 6

[*Continued on next page.*]

The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this informa...

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lied 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
⅛ Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water).....		0 12 0
Brunswick Black.....		0 7 0
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine.....		0 9 0
Cutrass Black Enamel.....		0 7 0

South Esk Bridge.

Montrose Bridge Joint Committee recently decided to make application to the Ministry of Transport for a grant of 65 per cent. for a bridge to be erected over the River South Esk, according to the plan submitted on August 23, and providing for a 24 ft. roadway, at an approximate cost of £88,000.

THE SCOTTISH BUILDER

SCOTTISH ECCLESIOLOGICAL SOCIETY

A MEETING of the Edinburgh District of the Scottish Ecclesiological Society was recently held in St. Cuthbert's Hall, Edinburgh. Mr. Thomas Ross, LL.D., presided.

Professor Charles Gourlay, B.Sc., F.R.I.B.A., of the Royal Technical College, Glasgow, delivered a lecture on Glasgow Cathedral. In the course of his remarks the lecturer said that the essential parts of most cathedrals were generally placed on practically one floor level, and these might be divided into two sections—respectively east and west of the "crossing." The eastern section in Glasgow Cathedral was unique in that it consisted of two stories, which in all old documents were referred to as lower and upper churches, but these terms did not convey the essential unity of the eastern arm of the Cathedral. As its site was one which sloped steeply downwards to a river towards the east, this led to the development of the design as executed, which was a work of genius on the part of the original designer, who produced in this portion the outstanding glory of the Cathedral. The placing of the high altar on the upper level gave the rightful prominence to this floor, while the placing of the Lady Chapel and the Chapel of St. Kentigern on the lower floor made it the necessary complement of the upper. The lecturer then showed the important influence of processions in the design of a mediæval cathedral plan by describing the ceremonial of the Sunday procession, and then proceeded to deal with the historical growth of the Cathedral. The first church on the site was that erected by St. Kentigern, and it probably occupied the south-west compartment of the present Lower Church. In 1115 David I of Scotland appointed his Chancellor, John Achains, to the bishopric, and John began the first Cathedral, which was consecrated in 1136. Its style would be Romanesque, but of its plan they had no knowledge.

The rough diagonal tooling, upwards to the left, to be seen on the surface of the stone wall near the Jocelin wall-shaft made it probable that a fragment of this Cathedral might yet remain. The 1136 Cathedral was burned down in 1176, and Bishop Jocelin rebuilt it, but only the wall-shaft named after him now remained. These fragments of early cathedrals being left in situ by later builders suggested that they marked a sacred spot, and the oldest sacred spot known to have existed within the building was the original grave of St. Kentigern, who was recorded to have been buried at the right-hand side of the altar in his church. The veneration paid to the resting-places of saints by pilgrims in the thirteenth century often led to the removal of their relics from inconvenient positions and their enshrinement in saints' chapels, and this appeared to have occurred in Glasgow Cathedral. A study of the base courses still existing showed that the Cathedral begun by Bishop Malvoisin about the year 1200 included the north and south walls of the present nave and transepts, while Bishop Walter built the wall and vault of the Lower Church and part of the north and south walls of the nave, with their responds. The next great building Bishop was Bondington, who built the eastern arm of the Cathedral, and continued the building of the parts already begun. Bishop Wishart redesigned the nave, but retained the old setting-out, which led to his executing the most beautiful combination of triforium and clerestory of this period now existing. Bishop Lauder built the tower, also part of the chapter-house, which was continued by Bishop Turnbull and completed by Bishop Cameron, who built the spire. Blacader's "aisle" was built by Archbishop Blacader between 1484 and 1508 to provide additional altars, but its upper story was never erected.

At the conclusion of the lecture Sir James Balfour Paul moved a cordial vote of thanks to Professor Gourlay.

NEW BUILDINGS IN SCOTLAND

Kilmarnock.—BUILDINGS.—The Dean of Guild Court has passed plans: Buildings in Lawson-street, in connection with spinning mill, for Douglas Reyburn & Co., at a probable cost of £150; buildings in Market-lane, in connection with extension to restaurant premises, for David T. Lauder & Son, at a probable cost of £900; bungalow in Knockinlaw-road, for G. Gilmour, at a probable cost of £725.

Dunoon.—COTTAGES.—The Dean of Guild Court has passed plans: Cottage at Kilbride-avenue, for R. Malloch; cottage, Alexander-street, for D. Campbell; cottages, Nelson-street and Alexander-street, for A. T. & J. T. Colquhoun.

Falkirk.—WAREHOUSE.—The Dean of Guild Court passed plans: Callendar Iron Co., Ltd., warehouse and fitting shop, at a probable cost of £1,250; bungalow, Major's-place, Falkirk, for J. Kean.

Glasgow War Memorial.

A war memorial to Glasgow Territorial R.A.M.C. units was recently unveiled by General Sir William Leishman, K.C.B., in the Cathedral. It is from a design by Mr. G. M. Brand, architect, Glasgow.

Clyde Bridge Banned.

The Glasgow Corporation recently decided to approve of the Provisional Orders promoted by the Corporation, with the exception of that part referring to the construction of the new bridge. A motion that this should be abandoned was carried by 38 votes to 19. The view was expressed that if this bridge were erected, and with the completion of the new bridge at Oswald-street, there would be four cross-river bridges within a short distance. The suggestion was made, however, that a bridge further down the river, possibly in the vicinity of the Finnieston district, would be more serviceable.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Masons' Plas-terers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/6	1/0½
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Biallgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Dumfries	1/6	—	1/6	1/6	1/6	1/6	1/6	1/3½
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/8½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/5½	1/6½	1/7	1/6	1/6½	1/6	1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/4½	1/4	1/5	1/5	1/4	11d. to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Kirkwall	1/5	1/5	1/4	1/4	1/5	1/4	1/4	1/0
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Stirlingshire (Eastern District)	1/8–1/10	1/8–1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 962

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	6
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—

		s.	d.
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1½ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	" "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/11	2/4½	3/7	4/-
Ogee Do. Do.	"	2/4½	3/1	3/10	4/9
Rain-water pipes with ears	"	2/9	3/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	64	0
Do. Do. in flats	"	63	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run.	0	6
Soldered seam	" "	1	0
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/0	
Do. service	"	1/8	2/2	2/7	3/10		6/9
Do. soil	"						
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	4
Do. Do. Sirapite	"	2	7
Do. Do. Keen's	"	3	7
Add sawn lathing	"	1	7
Add metal lathing	"	2	6
Portland cement screed	"	1	11
Do. plain face	"	3	3
Mouldings in plaster	per 1 girth	0	11
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing, and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	"	1	2
Preparing for and hanging paper	per piece	2/—to	4/

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

PATENTS

APPLICATIONS PUBLISHED *

215,298.—C. W. Watson: Method of, and machine for, coiling wire reinforcements for concrete pipes.

222,228.—E. Pollard & Co., Ltd., and E. Pollard: Antifriction supports for sliding doors of show-cases.

222,230.—W. F. Muir: Combined drainboard and apron for sinks.

222,313.—S. S. Rigers and Board & Co., Ltd.: Gully covers.

222,317.—W. Lissaman: Castors.

222,319.—F. B. Dehn (Boston Machine Works Co.): Cementing machine.

222,340.—F. Wheatley, Junr.: Partitioned boxes.

222,355.—T. M. Harvard and Leyland & Birmingham Rubber Co., Ltd.: Pad or buffer for the legs of chairs, tables, or other articles of furniture.

222,392.—B. H. Wood and H. L. Matthews: Expanding tables.

222,393.—E. Hangartner and J. Schlatter: Building blocks.

222,410.—J. T. Whittome: Casement windows.

217,227.—C. W. Watson: Machines for centrifugally moulding concrete or like structures, including pipes.

221,602.—Vigilant Sprinklers, Ltd., and B. C. R. Hitchcock: Fire protection systems for buildings and the like.

221,615: F. Bodson: Windows.

221,668.—W. McCaughan: Construction of walls for buildings or other structures.

221,687.—W. Orlovsky: Composition for facing surfaces, walls, and the like, and method of manufacturing the same.

210,459.—P. De Angelis: Heat insulating material.

221,742.—V. Wikkula: Porous cement.

222,899.—A. Pope, E. Vaughan and A. Pope: Circulator for hot-water systems for heating buildings.

222,923.—R. Caccia: Method of manufacturing lime-sand concrete, and bricks and pipes.

207,497.—E. Douzal: Process of manufacture of artificial marble.

223,001.—G. A. Wall and E. Babidge: Wall brackets, particularly adaptable for use with scaffolding and staging.

223,035.—C. Betz: Wall-board seam and fastening strip.

223,051.—W. H. Pheysey: Field and other wooden gates.

223,059.—J. Bell & Co. Proprietary, Ltd., W. R. D. Innes and M. S. Stanley: Construction of reinforced-concrete floors.

223,077.—J. Cable: Casement windows or doors.

223,079.—H. G. O. Forain: Injection device for concrete plastering.

223,108.—W. Evans: Devices forming a combined stay and fastener for windows.

223,109.—J. F. Goddard: Expansion joints for concrete and like structures.

223,116.—O. Bruster: Domestic hot-water boilers.

223,120.—A. Daniel: Construction of moulded floors.

223,138.—T. H. Hodgkinson and F. N. Hepworth: Boxes.

223,139.—W. K. Lusty: Boxes.

223,149.—J. Fowler & Co. (Leeds), Ltd., and G. Hobson: Elevators.

223,159.—R. Bonham: Combination of two plumber's turnpins and plumb-bob.

223,169.—F. J. Orton: Casement stays.

232,261.—E. J. Elgood: Wall and like structures.

223,269.—F. W. Foxon: Outdoor seats.

223,282.—A. Wilkins: Walls for buildings, and blocks therefor.

204,018.—Fortis Reinforced Concrete Safe Co., Ltd., and A. E. Hudd: Electromagnetic mechanisms.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.* † Denotes *provisionally accepted.*

‡ Denotes *recommended for acceptance.*

§ Denotes *accepted subject to modifications.*

BARLBY.—For erection of a central school, for the East Riding C.C. E.C.:—
*J. H. Carr & Son, Selby.

BELFAST.—For erection of two elementary schools, for the E.C.:—
*J. Copeland & Sons, Ltd.—(Euston-street).
*H. & J. Martin—(Templemore-avenue).

BIRKENHEAD.—For erection of a garage and additions at the infectious diseases hospital, for the T.C.:—
*F. Thomas & Son £1,649

BIRKENHEAD.—For erection and completion of the stores at Craven-street station, for the T.C.:—
*J. Davies £2,548

BIRMINGHAM.—Erection of premises for branch bank, at Spring Hill, for T.C.:—
*W. Sapcote & Sons..... £1,389

BIRMINGHAM.—Construction of bank at Erdington for T.C.:—
*J. T. Harris, Ltd. £7,580

BOLTON.—For the erection of a machinery, boiler and pump house, for the T.C.:—
*J. Byrom, Ltd.

BRISTOL.—Erection of wall and railings at Greenbank Cemetery, for T.C.:—
*E. Walters & Son..... £3,224 10

BRISTOL.—Erection of three houses at Fishponds-road, for T.C.:—
*Bissicks & Fletcher..... per house £440

CHELMSFORD.—For erection of 12 houses, for the T.C.:—

Messrs. Arnold	£5,350
Messrs. Marven	4,895
Messrs. Clayden.....	4,770
*F. H. Stewart	4,760

CHELTENHAM.—Erection of 15 pairs of non-parlour houses, for T.C.:—
*W. Drew..... per house £440

CHESTERFIELD.—Construction of underground conveniences in New-square, for T.C.:—
*Robson & Co. £5,197

DARLASTON.—For erection of 20 houses at Rough Hay, for the U.D.C.:—
*A. C. S. Teece £8,704

DONCASTER.—For extensions to the Yorkshire Penny Bank's premises in High-street, for the Yorkshire Penny Bank, Ltd.:—
*J. T. Wright & Son, Leeds.

EDGWARE.—For erection of branch of Westminster Bank, Ltd. Messrs. Hall-Jones & Dewhirst, architects:—

Hammond & Barr, Ltd.	£6,877
General Building Co.	6,856
L. H. & R. Roberts	6,790
W. Shurmur & Sons, Ltd.....	6,721
G. Godson & Son, Ltd.	6,659
*H. Neal, Ltd.	6,475

ILFORD.—For extensions at new Masonic Temple, Ilford. Mr. W. J. Lewis, A.R.I.B.A., architect, of Ilford. Quantities prepared by architect. Two schemes were submitted:—

F. G. Minter, Putney	£17,825 0 0	
	11,166 0 0	
Luton, Stratford	16,489 0 0	
	9,782 0 0	
Downsing & Davis, Romford	16,600 0 0	
	10,550 0 0	
Hunt, Hoddeston	17,046 0 0	
	9,310 0 0	
Hammond & Miles	16,046 8 10	
	9,908 4 9	
Shurmur, Ltd., Clapton ..	17,100 0 0	
	10,513 0 0	
Harbrow, Bermondsey	16,363 0 0	
	9,997 0 0	

LEEDS.—For erection of engine and pump house, for the T.C.:—
*W. Thompson & Son £1,287

LEEDS.—For extension to the Meanwood-road baths:—
Wood Bros. (Leeds), Ltd. £4,175 8 4

LEEDS.—For erection of 300 houses, for the T.C.:—
‡D. Laing & Sons, Ltd., Carlisle.

LEEDS.—Structural alterations to buildings adjoining Municipal Buildings, for an extension of the gallery, for T.C.:—
*J. T. Wright & Son..... £4,444

LIVERPOOL.—For alterations, decoration and furnishing the new electricity showrooms in Whitechapel, for the T.C.:—
*Ashby, Tabb, Ltd. £5,760

LIVERPOOL.—For erection of four sample houses for the T.C.:—
‡W. Griffiths & Sons and Cromwell Ltd.—
per house £400

LIVERPOOL.—For alterations and additions to premises in Primrose-hill, for the T.C.:—
‡Tippin Bros. £6,958

LIVERPOOL.—For the reinstatement of buildings damaged by fire at Calderstones estate, for the T.C.:—
‡Turner & Moss, Garston £622 15

LONDON.—For external work to dwellings in Regency-street, for the Westminster City Council:—

John Mowlem & Co., Ltd.	£492 0 0
Burton Bros.	475 0 0
R. M. Pearson	333 0 0
Sims & Russell	305 0 0
Townsends (Builders), Ltd.	289 16 6
*E. D. Hook, Ltd.	273 0 0

LONDON.—Construction of 24 flats, Lower North-street, for Poplar B.C.:—
*Geo. Simms £15,850

LONDON.—Making fit for habitation houses in Barbel-street, for Southwark T.C.:—

J. Tully	£1,034 0 0
T. J. Gabb.....	883 15 0
William Clark & Co.	618 0 0
‡E. C. Sames & Co.	558 16 6

LOWESTOFT.—For erection of four houses on the Beccles-road site, for the C.B.:—
*Leighton & Son.

MANCHESTER.—For sub-contractors in connection with the contract for alterations at the Osborne-street Baths, for the T.C.:—
**Plasterer and painter*—Horrocks & Hogg.
**Plumber*—A. Longworth & Son.

MANCHESTER.—For Alma Park Municipal School Domestic and Handicraft Centres, for the E.C.:—
*Tinker & Young, Ltd.

MANCHESTER.—For alterations and conveniences in Platt Fields, Manchester:—
*Critchlow & Barton, Ltd.

MERTHYR TYDFIL.—For supply of steelwork required for the Taff Viaduct:—
*Sir William Arrol & Co., Ltd., Swansea £10,000

NEWBIGGIN.—For erection of 66 houses, for the U.D.C. Mr. R. Appleby, surveyor, Council Offices, Newbiggin-by-Sea:—
James F. Dickman, Newbiggin-by-Sea £25,887 4

NEWCASTLE.—For the erection of a bridge across the Tyne, for the T.C.:—
*Dorman Long & Co. £571,225

NEWCASTLE.—For erection of four bridges on the new Newcastle-Tynemouth coast road, for the T.C.:—
*R. McAlpine & Sons £23,871

NORTHAMPTON.—For a pair of houses, special concrete construction, for the T.C.:—
*C. J. Fox, Northampton £960

NORTHAMPTON.—For erection of 56 houses, for the T.C.:—
*The Yorkshire Hennibique Contracting Co., Ltd. £27,576

NORTHWOOD.—For erection of 36 houses, for the Ruislip-Northwood U.D.C.:—
‡Mr. McNamara ..... £480 per house.

NORTHWOOD.—For the erection of the War Memorial Hospital. Mr. Leslie T. Moore, F.R.I.B.A., architect:—

E. Spark, Northwood	£11,275 17
Hill Bros., Northwood	10,893 0
Walter Lawrence & Son, Ltd.....	10,225 0
C. Miskin & Son, Ltd., St. Albans	9,954 0
Sabey & Son, Islington	9,798 0
Dove Bros., Islington	9,761 0
W. J. Page, Northwood	9,778 0
A. E. Prouting, Ruislip	9,695 0
J. W. Falkner & Sons, S.E.1	9,694 0
Geo. Wiggs & Son, Watford	9,682 0
*H. Neal, Ltd., Northwood	9,608 0

OLDHAM.—For various works for the new Higher Standard Centre at Ward-street, for the T.C. Mr. F. Thorpe is the architect:—
Excavating, Drainage, Brickwork and Concrete work—Whitworth Whittaker & Co.
Masonry—S. & J. Whitehead.
Joinery—Thomas Bros.
Plastering—Edward Pearce.
Slating—R. C. Fletcher.
Painting—J. Steventon.
Plumbing and Glazing—John Airey.

OLDHAM.—For painting the interior of the Market Hall, &c., for the T.C.:—
*Geo. Whitehead & Son (Decorators), Ltd.

OLDHAM.—For wood block flooring, for the T.C.:—
*E. B. Burgess & Co., Liverpool.

ORSETT.—For two new wards at the hospital, for the R.D.C.:—
*G. W. Cooke..... £627

OSSETT.—Completion of housing contract, for T.C. —
*— Greenwood..... £1,305 10

PONTEFRACT.—For reconstruction of the Coronation W.M. Club, at South Bailey Gate, for Messrs. J. Smiths, Ltd.:—
**Mason and bricklayers' Work*—Brown & Lodge.
**Joiners' Work*—J. Pease.

PONTEFRACT.—For erection of a bungalow at Carleton, near Pontefract, for Messrs. Garside & Pennington, architects:—
*Brown & Lodge.

PYRFORD.—Erection of police cottage, for the Surrey Standing Joint Committee :—
*C. & S. Allwork, Woking £828

QUORN.—For erection of a destructor shed, for the U.D.C. :—
J. Coltman & Co. £146 17 9

RAWMARSH.—For the erection of 25 houses, for the U.D.C. :—
*A. J. Pugh £11,225

SHEFFIELD.—Erection of transformer stations at Hangingwater-lane and Totley Rise, for the T.C. :—
*Wellerman Bros., Ltd. :
Hangingwater-lane £948 11
Totley Rise £2,097 15

SOUTH SHIELDS.—Erection of brick walls, for car shed extension, for the T.C. :—
*Gustavus, Bailey & Co. £2,685 16 6

STAINFORTH.—For erection of a Wesleyan Church hall, for the South Yorkshire Coalfield Commission. Messrs. Gelder & Kitchen, architects, Hull :—
*Johnson & Moore, Doncaster £8,175

STOKE-ON-TRENT.—Erection of six parlour houses, at Fenton, for the T.C. :—
*Challinor & Hughes £3,750

STOURBRIDGE.—For the construction of a 7in. sewer, together with manholes and lampholes, at Lye, for the U.D.C. :—
*Geo. Macdonald, Hunt & Co., Ltd., Harborne.

TILBURY.—For erection of 43 houses, for the U.D.C. :—
*Triangular Construction Co. £19,565

TILBURY.—For erection of 42 houses, for the U.D.C. :—
Brown Bros. (Grays), Ltd. £19,110

TILBURY.—For erection of 38 houses, for the U.D.C. :—
W. E. Walsham, Ltd. £17,290

TORQUAY.—Improvements to mortuary at St. Mary Church, for the T.C. :—
*A. E. Brock £170

TYNEMOUTH.—For a sub-station for the T.C. :—
*J. & W. Lowry £743 16

WAKEFIELD.—Alterations to Town Hall lavatories, for the T.C. :—
*Joseph Woodhead £479 6 6

WALLASEY.—For extensions to the Oldershaw school, for the T.C. :—
*J. A. Milestone & Son, Ltd. £8,350

WALLASEY.—For pointing and repairs at the Infectious Diseases Hospital, for the T.C. :—
*H. Dodd —..... £184

WARWICKSHIRE.—Erection of houses at County Mental Hospital, for the clerk and store-keeper, for the C.C. :—
*T. Hyam & Son £2,240

WHITEHAVEN.—Works to the harbour dam, for the T.C. :—
*Border Engineering Contractors, Ltd. £1,480

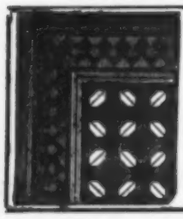
WOLVERHAMPTON.—For the erection of a new factory at Bushbury, for Messrs. Courtaulds, Ltd., estimated to cost £1,500,000 :—
**Steelwork*—Redpath Brown & Co., Ltd., Manchester.

WORKINGTON.—New park gates and stone piers for the Parks Committee :—
‡W. Hayward & Son.

WORTHING.—For erection of a chapel and superintendent's cottage and lodge, at Durrington Cemetery, for the T.C. :—
Benfield & Loxley, Ltd., Oxford £5,323

Concreting Ditches.

The Finance Committee of the London County Council recommend that sanction be given to the borrowing by Woolwich Borough Council of an amount not exceeding £37,000 for the purpose of concreting ditches at Plumstead Marsh. In their report the Committee mention that the Borough Council had stated that, although the concreting of the ditches was brought forward as a suitable work for the provision of additional employment, it had been projected mainly on public health grounds.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